The path to high status is paved with litter: a netnography of status competition among the Litterati.

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Abstract

Within marketing, postmodern perspectives relate conspicuous consumption and status to the realisation of self-identity. The consumption of goods and their symbolic meaning allow an individual to reinforce, create and maintain his or her identity. Notions of conformity and consumption of visible goods could be attributed to social identity theory, where identity shifts from context to context. The consumption or rejection of certain goods thus reinforces an individual's shifting identity among various contexts, such as home, school or work. It is the view of evolutionary psychology that theories such as social identity theory and consumer culture theory provide a proximal explanation of consumer behaviour, yet beyond these explanations are thought to be universal and ultimate drivers of behaviour. Evolutionary psychology presents cost signalling theory to help explain why individuals compete for status. However, existing evolutionary theories are still incomplete, particularly in explaining the paths in which individuals take to achieve status within a peer group.

This research explores *how* and *why* people engage in pro-environmental behaviour. A review of the literature indicates that a desire for status is the main underlying driver motivating this type of behaviour, however the literature further indicates that theory on status is still incomplete in terms of understanding the path a person takes to achieve higher status. Therefore the gap this thesis aims to fill is to clarify the path an individual takes to achieve higher status within the context of pro-environmental behaviour.

In order to identify how and why people engage in pro-environmental behaviour and strategies for status this research uses netnography to explore hierarchy negotiation within an online community of pro-environmental behaviourists called the Litterati. The Litterati is an Instagram community consisting of over 15,000 members worldwide, whom pick up and photograph litter. The main Litterati site and associated social media pages provide the visible conditions necessary for people to compete for higher status through cost signalling.

The research findings are presented as three levels. The first level addressed observed empirical events, consisting of the observed tactics used within the Litterati for gaining status. The observed tactics among the Litterati are the use of visual appeal, time, humour and reciprocity. The next level addresses events, which are not wholly observable. This consists of the themes or patterns arising from the retroductive analysis of the interviews and participant observation and how they relate to status strategies. The main themes that help explain the paths to status are self-efficacy; community; and reciprocity or validation. The third level applies evolutionary theories of status and cost signalling to explain the underlying causes of the observed behaviours. The two strategies for status, Dominance and Prestige are presented as manifestations of the dynamic relationships between each level of the findings.

This research contributes to exiting theory by clarifying the path an individual takes to achieve higher status, with the analysis demonstrating that Dominance and Prestige are not as distinct as the extant literature would suggest. Additionally, this research indicates that behaviour online influences behaviour offline provided there is a strong sense of community and feelings of self-efficacy are promoted through social modelling and social persuasion. The sense of validation participants reported through the community membership led to an increase in their uptake of pro-environmental behaviours offline, including changes in their consumption decisions. The wider implications of these findings indicate online communities of ethical consumption, such as the Litterati, promote a feeling of passive activism, where discussion of social change and interaction result in behaviour change.

“What is research but a blind date with knowledge?”
Will Henry

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As the saying goes, ‘it takes a village’ and nothing could be truer in this case.

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GLOSSARY AND LIST OF ACRONYMS

Dominance – one of two reported strategies for status, which force is used to induce fear and submission.

Intergovernmental Panel on Climate Change (IPCC) – the Intergovernmental Panel on Climate Change, the leading international body on the assessment of the risks associated with climate change. Developed by the United Nations.

Perceived Behavioural Control (PBC) – the perception of how difficult or easy a particular behaviour will be. This extends to external factors that may impede or promote the performance of that behaviour.

Perceived Consumer Effectiveness – the extent to which an individual consumer believes his or her actions alone can make a difference.

Prestige – one of two reported strategies for status, which sharing of knowledge is used to gain respect.

Pro-environmental behaviour (PEB) – behaviour intended to benefit, or reduce human's negative impact on the environment, thought to be altruistically motivated, PEBs are also often referred to as the following: environmentally friendly behaviours, conservation behaviours, environmentally significant behaviours, sustainable behaviours and responsible environmental behaviours.

Pro-social behaviour – voluntary actions or behaviours undertaken to benefit others or society at large.

Prosumption –typically used in reference to online material in which the simultaneous production and consumption of content occurs.

Self-efficacy – a person's beliefs about his or her own capability to perform certain behaviours at a desired level or skill.

Social Marketing – the application of traditional marketing tools and techniques to promote socially desirable behaviours.

Status – social rank within a peer group.

Sustainable consumption – how environmentally friendly consumers engage with the marketplace. Also known as responsible consumption or anti-consumption, refers to consumer behaviour, which promotes environmental protection and reduces the removal of natural resources from the earth's surface.

Sustainable Marketing – applying industrial ecology principles to marketing strategies, which promote a transformation and reduction in traditional consumption.

Theory of Planned Behaviour (TPB) – a simply linear model aimed to predict behavioural outcomes via cognitive progression where beliefs lead to attitudes, attitudes lead to intentions and intentions lead to behaviour.

Values – enduring individual beliefs that one code of conduct is preferable to another.

Value-based models – models of behaviour change used to predict and promote socially desirable behaviours, based on the same core notions of intentions, beliefs and behaviour. This includes the Theory of Planned Behaviour, Attitude – Behaviour- Choice, or variations thereof.

Chapter 1: Introduction

This chapter provides a brief introduction to the problem, scope and context for this research. This research uses a conceptual framework of evolutionary psychology to explain how and why people engage in environmentally friendly behaviours. More specifically, this research explores how and why people pick up and photograph litter. It is from the evolutionary perspective that individuals engage in this type of behaviour as a means to increase their social status. This chapter will introduce the problem human consumption has had on the global climate. Next it will suggest evolutionary psychology and the theory of status as a useful framework for understanding pro-environmental behaviour. Following the brief background information, the research aim and objectives are identified. The remainder of the chapter describes the structure of this thesis.

1.1 Background

The issue of changing climate has been a point of contention within the marketplace for decades (Peattie and Peattie, 2009; McDonagh and Prothero, 2014). However, it is only within the last two decades that the link between human consumption and climate change has become more widely accepted, so much so that scientists have now begun to refer to the current climate as the Anthropocene (Wisman, 2011; IPCC, 2014; Webb, 2012). Anthropocene is a geological term that encapsulates the full impact humankind has had on the earth (Wisman, 2011; Webb, 2012). It is the era where humans are argued to have made a significant impact on the global climate by removing the earth's resources in order to fulfil inherent desires for survival, comfort, identity and status (Belk, 1988; McCracken, 1986; Ahuvia, 2005; Wattanasuwan, 2005; Sundie et al., 2011; Griskevicius et al., 2010). At the core of the contention within the marketplace is the role of marketing professionals who encourage increasing levels of consumption much to the detriment of the environment (Peattie and Peattie, 2009; McDonagh and Prothero, 2014).

Recognising the role marketing has in the relationship between consumption and the environment, recent work within the field of marketing has called for a transformation of marketing strategies to incorporate sustainability principles at their core (McDonagh and Prothero, 2014). While sustainability principles have evolved since their introduction in the 1970's, at their core these principles reflect actions that aim to meet the needs of the present without compromising the needs of the future (Leary et al., 2014; Watkins et al., 2015). Efforts to increase the focus on sustainability within marketing to this point have improved; however, given the continued rise in climate related issues it is apparent that a systematic change is necessary to change human consumption. Thus, this research moves away from more traditional marketing theories and uses evolutionary psychology, which seeks to provide a unifying framework for understanding behaviour, in order to examine alternative methods for encouraging sustainable or pro-environmental behaviours (Saad, 2008; Griskevicius et al., 2012).

The term pro-environmental behaviour (PEB) refers to any behaviour that reduces the negative impact on the environment, including consumer behaviour. Within the literature PEB includes an ever-increasing variety of behaviours; including reduced or anti-consumption, the purchase of 'green' products, organic products, veganism and vegetarianism, energy consumption and transportation choices (Stern, 2000; Watkins, et al., 2015). This type of behaviour extends beyond consumer choices of goods or services and includes lifestyle practices (Gilg, Barr and Ford, 2005; Peattie and Peattie, 2009; Spaargaren, 2011). Given that the environment is defined as a public good and protecting it is thought to be in the best interests of society, pro-environmental behaviour is considered a pro-social behaviour that is motivated by altruism (Griskevicius et al., 2010; Zabkar and Hosta, 2013).

Within the unifying framework of evolutionary psychology, studies based upon the mid-level theory of a universal desire for status demonstrate that altruistically motivated behaviour, such as pro-environmental behaviour, may be an effective method for increasing status within a peer group (Hardy and Van Vugt, 2007; Griskevicius et al., 2010). Within this thesis status is defined as the rank an individual holds within a social hierarchy, where consumption serves as a means to signal status (Sundie et al, 2011). Individuals within a social hierarchy compete for greater social attention, where competition reflects his or her ability to compete for resources compared to peers (Cummins, 2005). Further empirical evidence suggests that there are two main strategies for increasing status, where an array of available tactics will fulfil either a Dominance or Prestigious strategy for status (Henrich and Gil-White, 2001; Russell and Fiske, 2008; Cheng et al., 2010, 2013). A Dominance strategy is typically characterised by aggression, competition and coldness, whereas a Prestige strategy is characterised by knowledge, altruism and friendliness.

According to Buss (2007) there currently is no complete theory on status. Although several researchers have explored status strategies (Henrich and Gil-White, 2001; Cheng et al 2010 and 2013); social dominance (Hawley, 1999 and 2011; Cummins, 2005) and tactics for hierarchy negotiation (Kyl-Heku and Buss, 1996; de Miguel and Buss, 2011), the paths or routes for achieving status within a peer group or social hierarchy are still not clearly understood.

Buss (2007) states a complete evolutionary theory should identify the different routes or paths to achieving higher status. Two strategies for achieving status are identified as either Dominance or Prestige (Henrich and Gil-White, 2001; Cheng et al., 2013). According to the literature, Dominance and Prestige strategies for status have similar influence and effect on position within a hierarchy, yet each consists of distinctive and divergent characteristics such as 'personality traits, pro-social tendencies and abilities' (Cheng et al., 2010; p. 342). Thus Prestige and Dominance can be viewed as two distinct types of status (Halevy et al., 2012; Cheng et al., 2013).

Literature exploring the characteristics of Dominance and Prestige identify Dominance through the demonstration of assertiveness, competition, coercion and aggression (Henrich and Gil-White, 2001; Halevy et al., 2012; Cheng et al, 2013). Prestige is most often characterised by competence, knowledge, hard work and altruism (Henrich and Gil-White, 2001; Halevy et al., 2012; Cheng et al., 2013). Individuals exhibiting a Prestige strategy are typically more well-liked, respected and copied, thus increasing their chances to solve reoccurring problems of survival such as to form coalitions, or attract and retain mates (Halevy et al., 2012; Cheng et al., 2013; Griskevicius et al, 2012). Conversely, Dominant individuals are often described as individuals that are feared and avoided by others within a peer group (Hawley, 1999; Henrich and Gil-White, 2001; Halevy et al., 2012). Henrich and Gil-White (2001) further differentiate the process of achieving status and the resulting status, in that an individual may use a Dominance strategy for achieving higher status but the end result could be perceived as Prestige. Although there are clear distinctions between Dominance and Prestige within the literature, studies demonstrating relationships between competition and Prestige suggest the relationship between competition and types of status requires further clarification.

For instance, Cheng et al. (2010) suggests that people can compete via Prestige. However, a closer examination of the characteristics of competition indicates that competition is more closely linked to Dominance (Russell and Fiske, 2008). Adding to the complexity and lack of understanding in the relationship between competition and strategies for status is provided by Hardy and Van Vugt (2006). In their study, Hardy and Van Vugt (2006) demonstrate that altruism, a trait typically associated with Prestige, can be utilised to compete for higher status, while competition is typically associated with Dominance.

The literature indicates that individuals of lower status tend to copy the behaviour of higher status individuals or cooperate with them, especially when competition is too costly or risky (Eckel and Wilson, 2007; Cummins, 2005; Buss, 2007). Buss (2007) suggests this is a useful method to ensure long-term survival; however, the literature does not discern between a competitive or cooperative method being associated with either a Dominance strategy for status or a Prestige strategy for status.

Evidence provided by Griskevicius et al. (2010) demonstrates that PEB can increase an individual's status due to the costs associated with most pro-environmental acts. The nature of PEB as an altruistically motivated behaviour, as posited by Stern (2000) obfuscates extant notions as to whether or not PEBs may be used competitively or cooperatively for status (Kaiser and Byrka, 2011; White et al., 2013; Zabkar and Hosta, 2013).

Although existing studies on status strategies identify status as either Dominance or Prestige, the relationship between tactics, competition and strategy for status requires theoretical understanding to complete the theory on status. Thus, to contribute to the existing theory on status this research explores and clarifies the paths to achieving higher status within a peer group, within the context of pro-environmental behaviour.

1.2 Aims and objectives

The overall research aim is to clarify and explain the path individuals use to increase status within a peer group. This is done by building upon the existing evolutionary psychology theory of status by exploring how individuals use tactics identified through cost signalling theory (Zahavi & Zahavi, 1997; Saad & Vongas, 2009; Griskevicius et al, 2010; Sundie et al, 2011).

The research objectives, which underpin the overall research aim, are:

1. To identify patterns which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members;

2. To explore how people compete for higher status within an online community called the Litterati, a subculture of pro-environmental behaviourists;

3. To better understand the paths or routes people use to achieve social status within a hierarchy;

4. To evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community; and

5. To discuss how a strategy for social status, competition and tactics can be applied to the theory of the universal desire for status.

Cost signalling theory argues that visible displays of behaviour that are difficult to copy demonstrates an individual's ability to incur costs. Within the context of this research cost signalling behaviours include visible displays of pro-environmental behaviour, humour, or time in order to gain social status within a peer group. The context in which this research is carried out is within an Instagram community called the Litterati. The Litterati has over 15,000 members worldwide where members take photos of litter and post them on Instagram with the hash tag Litterati. The main Litterati site and associated social media pages provide the visible conditions necessary for people to compete for higher status through cost signalling. The main research questions is: To what extent can cost signalling theory and the universal desire for status help transform extant marketing strategies to explain *how* and *why* people engage in pro-environmental behaviour as a means of changing consumption?

1.3 Scope

The field of marketing and the sub-field of sustainable marketing, explores issues beyond consumer behaviour, including supply-chain management, branding, and corporate social responsibility. However, these areas of marketing are beyond the scope of this study. This research examines the individual as a decision maker, which is one component of the larger problem of environmental protection. Additionally, within marketing discourse, the term sustainability is often used to describe environmentally friendly behaviours of consumption, however, its definition continues to change within the literature and will be used here interchangeably with (PEB). Lastly, this thesis utilises evolutionary psychology theory, which applies to all social animals, including humans. However, this research focuses on human behaviour and will limit any discussion to human behaviour as opposed to all social animals.

1.4 Structure

This brief introductory chapter identified the context, scope and direction of the research. The remainder of the chapter further establishes the structure of the thesis by providing a summary of each remaining chapter.

The next chapter will provide a brief overview of the larger problem of climate change and the role the consumer has in contributing to that problem. Chapter two establishes the need for further exploration into consumer behaviour as a means to change consumption to protect the environment as opposed to harming it. The chapter examines current practices within marketing on encouraging sustainable consumption. It critiques the extant literature on traditional marketing techniques to encourage PEB. Lastly, the chapter analyses the use of value-based models, commonly used to promote pro-social behaviour, such as pro-environmental behaviour.

Next, chapter three introduces evolutionary psychology as the conceptual framework for this research. The chapter presents the core foundations of evolutionary psychology along with the central criticisms of the discipline. The chapter, goes on to identify the desire for status through the emergence of group living as it applies to evolutionary theory and cost signalling theory. It is thought that through the emergence of group living the desire for status within a peer group became an important mechanism for survival.

Chapter four describes the importance of status and the existing knowledge on strategies for achieving higher status within a peer group. The chapter goes on to identify the characteristics of each strategy for status and the conditions, which may influence the decision to choose either a Dominance or Prestige strategy. This includes looking at both natural and environmental stimuli, which have been shown to influence behaviour. It is within this chapter that the core model for this research will be explained through the evidence provided by the literature and applied to evolutionary theory. The model outlines the key factors, which this research proposes influences the decision to choose one strategy for status over another. It further proposes how and when each strategy may be utilised along with a corresponding tactic.

Chapter five presents the methodology. This includes a brief discussion on the philosophical antecedents of social science research, justification of the research methods and the analytical strategy. This research uses netnography combined with in-depth interviews to understand the relationship in question from a multi-dimensional perspective, consistent with critical realism philosophy and the development of evolutionary psychology theory. The analytical strategy incorporated visual analysis of photos collected during the participant observation and retroductive analysis of the interviews. Consideration of the quality and validity of the data are also considered for academic rigour.

Chapter six presents the macro level findings of the netnography, discussing the key patterns and themes that emerge from the data. This chapter responds to research objective number one. The core findings of the data collection are discussed in a reflexive manner consistent with a critical realist approach. Incorporating reflexivity and theory into the description of the findings results is considered to provide a much richer analysis (Barron, 2013). Thus the results and discussion are combined to present a much richer and clearer report of the research findings.

Chapter seven explores the micro level findings of the netnography and responds to research objectives two thru four. It further provides support for the four theoretical propositions, which aim to contribute to existing theories on status. This chapter also discusses the data in terms of the proposed theoretical model outlining the path for status seeking behaviour within a peer group.

The final chapter makes broader applications and discussion to theory and the proposed model presented in Chapter 4 in order to fulfil research objective five. It presents the key findings in relation to the research objectives, then makes comparisons to broader theories within marketing, such as Consumer Culture Theory. The chapter then describes the theoretical and methodological contributions this research makes, as well as practical contributions to the field of marketing. Lastly, the final chapter describes the limitations of this research and areas of future research.

Chapter 2: Human consumption and climate change

The aim of this chapter is:

- To provide an overview of the problem of climate change from consumption.
- To present three perspectives on the drivers of human consumption.
- To describe the complexity of changing consumption and traditional methods for encouraging behaviour change through marketing.

Increasing evidence is linking human consumption of resources to the rising level of greenhouse gas emissions (GHGs)(Stern, 2000; Vandenbergh, 2004; IPCC, 2014). This rise in GHGs has resulted in increased climate variability, causing droughts, floods, sea level rise and spread of diseases (IPCC, 2014). Not only do these projected impacts affect human safety, it also threatens survival of an increasing global population (Jackson, 2009). These changes in the global climate have made it apparent that reducing GHG emissions from human consumption is a priority for insuring future survival. The challenge is to significantly reduce the negative implications that arise from consumption, while adhering to the favoured neo-liberal political approach to economic growth (Helm, 2008; Jackson, 2009; Barr et al, 2011; Webb, 2012).

In 2006, economist Sir Nicholas Stern predicted a 20% reduction in the global economy if 1% GDP was not invested in response to the changing climate. Thus policy makers are challenged with promoting consumption in individual consumers that has less of a negative impact on the global climate, while also ensuring economic stability (Helm, 2008; Jackson, 2009). Efforts to reduce GHG emissions globally focus on systemic changes in the energy and transport sectors (Corner and Randall, 2011; Gough et al., 2011). The greatest amounts of direct GHG emissions from households and businesses are from heating, electricity and fuel for transport (Corner and Randall, 2011). However, a study by Gough et al. (2011) indicates that direct GHG emissions from household energy and fuel consumption accounts for only 20% of total private emissions. The remainder of total private GHG emissions is derived from consumer goods and services (Wells et al., 2011; Barr et al., 2011).

In light of the predicted impacts of global climate change, both the European Union and the United Kingdom have committed to reducing GHG emissions to 80% below 1990 levels by the year 2050 (Corner and Randall, 2011; Faber et al., 2012). Further that, the UK has committed to reducing GHG emissions by 34% below 1990 levels by 2020 (Gough, et al., 2011). These commitments made by both the EU and the UK have punctuated the need to adopt policies which promote a low carbon economy, relying on a variety of measures. These measures, according to Wells et al. (2011) include innovation in technology, regulation on production, investment in alternative energy sources, financial incentives for companies to reduce emissions, education and organisational change.

Although there is still some scepticism regarding the relationship between human consumption and climate change, many organisations and governments have recognised the relationship as a pivotal political issue (Ratter et al., 2012; Scruggs and Benegal, 2012; Webb, 2012). Notwithstanding solutions such as technological advances and policy regulations, it is commonly accepted that changing consumption is a vital component in addressing the issue of climate change and sustainability (Collins et al., 2003; Jackson, 2005; Wells et al., 2011; Webb, 2012). Governments seeking to promote sustainable consumption within the dominant economic paradigm of continual growth encourage individuals to internalise PEB decisions (Webb, 2012), thereby placing responsibility to protect the environment on the individual as opposed to the government or corporations (Webb, 2012; Spaargaren, 2011).

Current scholarship largely accepts that existing technology and policies will not produce the significant and timely emissions reductions necessary to reach the IPCC suggested stabilisation level of GHGs, between 450 − 550 ppm (Skippon et al, 2012; Helm, 2008). Given that a majority of GHG emissions are from consumer goods and services, voluntary behaviour change has become the primary focus for mitigating climate change, especially within the United Kingdom and Scotland (Jackson, 2005; Lucas et al, 2008; Collins et al, 2003; Wells et al., 2011; Faber et al, 2012). Policy makers, non-profit organisations, and marketers alike, want to encourage voluntary changes in consumption but knowledge of what effectively engages the public in making long-term lifestyle changes remains challenge.

For example, Corner and Randall (2011) briefly describe the *Act on CO_2* campaign run by the UK government in 2010. The campaign aimed to encourage the adoption of different types of PEBs with the idea these behaviours could easily fit with individual's current lifestyle. One advert used during the campaign was titled 'Bedtime Stories'. The advert displayed a child listening to a bedtime story emphasising how scary climate change is. The advert ends with the story unfinished, indicating it is up to the viewer to finish the story, thus placing responsibility on the viewer to change his or her lifestyle to help mitigate future changes to the climate (Corner and Randall, 2011). Another advert within the same campaign suggested 40% of the UK's emissions were linked to individual behaviours, with private car transport being the biggest contributor. The advert then suggested the public reduce their driving distance by 5 miles a week to reduce the UK's GHG emissions. The campaign was highly criticised for its use of fear with the 'Bedtime Stories' advert and the suggested actions from the campaign were viewed as disproportionate to the problem. This example highlights the need for greater understanding of what motivates individuals to engage in PEBs and governments can effectively communicate the need for behaviour change.

What further challenges practitioners is the lack of consensus within extant academic literature on the factors that influence sustainable consumption (Leonidou et al., 2010). Furthermore, Kilbourne and Beckman (1998, cited in McDonagh and Prothero, 2014) stated that by taking the same approaches to understanding consumer attitudes and behaviours will not provide the solutions needed to achieve long lasting solutions to growing climate concerns. Thus there is both opportunity and scope for non-traditional approaches for consumer researchers to further explore individual concerns about sustainability and consumption. The following section discusses several perspectives on the drivers of consumption, followed by an analysis of current techniques for changing consumption decisions to favour sustainability.

2.1 Perspectives on consumption

This section provides three perspectives on consumption typically used within the field of marketing research. This includes the sociological, psychological and cultural perspectives on consumption.

2.1.1 The desire to consume from the sociological perspective

Economist and sociologist Thorstein Veblen (1899) observed the consumption habits of the leisure class. Based on his observation he theorised the ever-increasing appetite for the accumulation of goods is fed by the imagination and the desire to fulfil fantasies (cited in Patsiaourias and Fitchett, 2009). Veblen's work has influenced many consumer researchers, with particular support for arguments on social structure and class (Chaudhuri and Majumdar, 2006). New, luxurious possessions demonstrated the wealth of an individual among those he observed, yet the specific types of goods considered to be luxurious may vary by culture (Wisman, 2011; Chaudhuri and Majumdar, 2006; Griskevicius et al., 2010). For example, the Tsimane' of the Amazon, a society of farmers and foragers in rural Bolivia that are increasingly exposed to a market economy, signal status with goods such as radios, watches, jewellery, baseball caps and shoes (Godoy et al., 2007). In the United States, status is often signalled with appliances, clothes, cars, electronics and furniture (Heffetz, 2012). Among the rising middle class in India, appliances and packaged foods are signals of status (Chaudhuri and Majumday, 2006). And the Kwakiutl tribe in North America signal status by giving away or even burning their possessions (Griskevicius et al., 2007).

In an attempt to explain consumer behaviour, Veblen posited that the consumer's insatiable appetite to consume luxury goods stems from the inherent desire for status and the emulation of others (Wisman, 2011). Individuals of lower status often aim to emulate those of higher status and will therefore participate in higher levels of consumption (Wisman, 2011; Ordabayeva and Chandon, 2011). Veblen states that, 'human behaviour – and consequently consumer behaviour – is produced via the interaction of instinctual aspects of individual and institutional forces, the interplay between nature and nurture, mind and environment' (Patsiaouras and Fitchett, 2009, p. 735). It is from this perspective consumer research emerged in an effort to understand and explain the interaction between the individual and institutional forces, and how these forces act upon consumption.

2.1.2 Consumption and identity, the psychological perspective

Another perspective of consumption is the psychological one. Here the focus is the relationship between the self and the items we consume. Possessions from this perspective serve to create and maintain identity, as well as define our place in society, as it relates to self-esteem (Wattanasuwan, 2005; Wang et al., 2012; White et al., 2012). Belk's (1988) work on Possessions and the Extended Self made the notion of identity and consumption pivotal to consumer research. The evidence he presents focuses on the self-perception of identity and how possession strengthen these perceptions. He further relies on anthropological studies that explore rituals involved with possessions and what happens to possessions after death to demonstrate the connection we have our possessions.

The psychological perspective in consumer research attempts to link attitudes to behaviours within a specific social context (Martins et al., 2012). Attitudes are thought to contribute significantly to the protection of self-esteem, were self-esteem is defined as the motivation to either protect or enhance the self-concept (Banister et al., 2004). According to Banister et al. (2004) maintaining self-esteem and identity through the consumption of certain goods is associated with a 'strategic sense of public self' (p. 852). For instance in their study on sustainable lifestyles among mothers, Black and Cherrier (2010) show that consumption of environmentally friendly goods is done so in self-interest as opposed to an intrinsic concern for the environment. They conducted 16 in-depth interviews to find the motivation to engage in sustainable consumption ranges from financial concerns, comfort, and independence and for some, caring for the environment. Consumption of environmentally friendly products allows individuals to symbolically express who they are or who they want to be in line with their existing identities (Black and Cherrier, 2010)

An additional conceptualisation of consumption of goods from the psychological perspective is how possessions help distinguish an individual's unique identity, as they contribute to an individual's sense of belonging and group identity (Belk, 1988; Wattanasuwan, 2005). The symbolic consumption of goods is what may lead an individual to accept or reject certain types of goods based on group identity (White and Dahl, 2007). For instance, resistance to the consumption of certain goods helps to further create a new identity (Wattanasuwan, 2005). As postmodern society continues to develop strongly integrated subgroups, where identity experiences temporary shifts, consumers seek to conform as a means to enhance his or her self-image, or status (Chaudhuri and Majumdar, 2006). As an individual's identity changes between time and location, for example, school, work, or home, consumption continues to rise through the constant creation and maintenance of identity (Ahuvia, 2005; Wattanasuwan, 2005). The relationship of consumer identity and status is discussed further in Section 2.2.1.

2.1.3 Culture of consumption

A third perspective on consumption approaches consumer behaviour as a cultural phenomenon. Consumption and consumer behaviour is thought to be occur within a complex system of cultural meanings, individual actions and the marketplace (Arnould and Thompson, 2005). As individuals seek to change their consumption they are constrained within the current marketplace and the dominant consumer culture (Firat and Venkatesh, 1995; Holt, 2002; Chaudhuri and Majumdar, 2006; Scaraboto and Fischer, 2013). For instance, in their work on plus-sized fashion bloggers, Scaraboto and Fischer (2013) uncovered the barriers to plus-sized fashion consumption. They found that larger-sized women have difficulty finding stylish clothing they desire within the marketplace, and without a collective consumer identity they lack the ability to mobilise a broader change within the dominant corporate culture. It is further perceived that this dominant corporate culture predisposes consumption towards certain identities (Arnould and Thompson, 2005).

As with the plus-sized fashion movement, a lack of collective identity provides a barrier to certain types of consumption. This extends to the issue of sustainable or reduced consumption, where other identities, such as mother, student, sister, pervade consumption decisions (Ahuvia, 2005; Black and Cherrier, 2010). The continual self-creation project tied to consumption relies heavily on increasing levels of consumption, as driven by the influence of marketing and Western culture. Belk (1988) and Wattanasuwan (2005) ague that as our collection of possessions grow, this creates a historical reflection of our personal history, whereby ‘seeing’ a possession allows us to 'be' the perception of the object and what it means is incorporated into our own personal narrative (Cherrier and Murray, 2007; Wright et al., 2012).

As individuals seek to create and belong they are forced to consume (Chaudhuri and Majumdar, 2006; Holt, 2002). However, many efforts to reduce consumption fail to connect issues of identity, norms and power in the marketplace within the sustainable consumption debate (Wells et al., 2010). Changing consumption to be more sustainable calls for methods that go beyond simply engaging the public in climate change issues and instead address the intrinsic motives humans have to consume at increasing levels (Patsiaouras and Fitchett, 2009). In the current system where prosperity does not occur without growth, one may ask whether or not the individual consumer does have the power to change his or her own behaviour and reduce their negative impact on the environment, particularly when it is thought that the consumer is heavily influenced by the marketplace and marketing messages. For example, Simms and Potts (2012) describe the desire to consume as something that is manufactured or engineered by advertisers. They place the onus of consumption on the advertising industry stating the use of psychological manipulations to keep individuals buying 'stuff', thereby removing all responsibility to protect the environment from the consumer.

Consumer research often combines these three perspectives to analyse consumer behaviour. The next section examines the role of the consumer more closely, with consideration for the multi-disciplinary view on consumer behaviour.

2.2 The visible consumer

Considering the dominant logic of consumer research and the differing perspectives on the drivers of consumption it is difficult to pinpoint not only how to influence consumption but also how to incorporate principles of sustainability (Leonidou et al., 2010; Wells et al., 2011). According to Holt (2002), the normative effects from peer interactions and movement of managers between firms, is what has led to the dominant paradigm in branding and perpetuates the current dominant Western consumer culture, is unsustainable. Rapid industrialisation, media and social media combined with marketing efforts create an ideal lifestyle that many consumers strive for. The signal displayed from conspicuous consumption is thought to have greater utility or payoffs for people, especially as their income increases. It promotes a lifestyle where happiness and satisfaction relies solely on consumption of goods (Arrow et al., 2004). Old visible goods are exchanged or discarded to make room for new visible goods. This visible form of consumer behaviour takes precedence over more environmentally friendly types of behaviour, which are often not visible to others. The consequences of this throw away culture, where identity is constantly shifting results in environmental degradation, resource waste and a planet that will no longer be able to sustain its population (Simms and Potts, 2012).

2.2.1 Consumer identity

Increasing the level of possessions signals material wealth, or at least the perception of material wealth, thus as more examples of increasing income inequality arise we see lower income individuals devoting more shares of their income to luxury goods as opposed to utility or common goods (Ordabayeva and Chandon, 2011). Goods that increase the perception of status have a higher utility compared to other goods because status is more valuable to individuals than other types of utility (Heffetz, 2011). The project of creation of self is continual throughout an individual's lifetime and thus leads to the rejection of older possessions as new meanings attached to goods emerge (Ahuvia, 2005; Wattanasuwan, 2005). The continual behavioural cycle of consumption of new goods and rejection of old ones has contributed to the climate issues we face today. However, possession alone is not enough to maintain strong sense of self. It is through the visible act of consumption that allows an individual to display a created identity by signalling his or her wealth and status, a concept that is spreading to countries with a rising middle class (Chauduri and Majumday, 2006; Griskevicius et al., 2010; Sundie et al., 2011; Heffetz, 2011). Thus the conceptualisation of identity through consumption is as much an individual act as it is a social one.

Work by Cherrier (2007), Cherrier and Murray (2007) and more recently, Ferreira and Scaraboto (2016) support the notion that consumption is construed as both an individual and social endeavour (Cherrier and Murray, 2007; Cherrier, 2007).

Ferreira and Scaraboto (2016) examined the material object-consumer relationship by conducting a netnography of the shoe brand Melissa. They examined the online interactions, discussions and photos of Melissa shoes on various blogs and social media pages dedicated to the brand. Among the data collected the authors indicate that consumers of the brand devote a significant amount of creative energy to their individual identity narratives on social media, which has become part of a larger cultural practice. The Melissa brand shoes are made of plastic, thus creating a shoe that is mouldable in ways that are not possible with traditional shoes. The object-consumer relation in this instance is examined in way that promotes an ever-changing identity that continues to evolve.

Cherrier (2007) examines the self-identity process and collective identity process as co-constructive in order to create a desired personal identity. She defines self-identity as the constructed relation between the similarities and differences we perceive to occur between others and ourselves. The collective self emerges from interactions with various groups, such as media, peers, and public authorities. Cherrier's (2007) approach views ethical consumption, including sustainable consumption, as a co-productive process in which competing identity goals struggle to recombine into a newly formed identity, such as an ethical one. The desired identity of ethical (sustainable) consumer is not achieved solely through self-reflection and inquiry; it requires the support and co-production provided by social influence.

The symbolic consumption of goods is what may lead an individual to accept or reject certain types of goods based on group identity (White and Dahl, 2007). As postmodern society continues to develop strongly integrated subgroups, where identity experiences temporary shifts, consumers seek to conform as a means to enhance his or her self-image, or status (Chaudhuri and Majumday, 2006).

Additional research suggests that when an individual feels his or her relative status is ambiguous, he or she will adopt the behaviour or consumption patterns similar to a reference individual of either higher or equal status to regain a sense of self, thus producing value from consumption (Chaudhuri and Majumday, 2006; Firat and Venkatesh, 1995; Henrich and Gil-White, 2001). Adhering to norms of in-groups, or conforming through consumption, allows an individual to achieve a positive self-identity (White and Dahl, 2007). As long as a product or behaviour conforms to positive groups that an individual wishes to be associated with, they will adopt similar behaviours (White and Dahl, 2007; Wattanasuwan, 2005).

This section examined consumption from the sociological, psychological and cultural perspectives. The main drivers of consumption were discussed from each perspective to provide an overview of existing theory on the motivation to consume and the problem it has created for the global climate. The next section will describe pro-environmental behaviour (PEB) and how it is defined within consumer research. It is from this continued exploration into the components of pro-environmental behaviour that policy makers and researchers may influence changes in how we consume such that it reduces the negative impact we have on the environment.

2.3 Defining PEBs

In Chapter 1, pro-environmental behaviour (PEB) was briefly defined as behaviour that reduces the negative impact on the environment, including consumption, is termed pro-environmental behaviour (PEB) (Stern, 2000). This definition, although vague, has evolved to include a variety of behaviours, which aim to protect the environment. This extends not only to activities such as environmental preservation, but also reduced consumption or anti-consumption, ethical consumption, vegetarianism and veganism, alternative forms of transportation, and renewable energy consumption (Leary et al., 2014; Watkins, et al., 2015). What further complicates the definition of PEBs is that research on this topic attributes the various types of PEBs to differing causal factors (Leary et al., 2014). For instance, the motivation to recycle is perceived to be different than the motivation to reduce energy consumption.

Given the variety of factors thought to influence PEBs, Gilg, Barr and Ford (2005) argue that the combination of PEBs should be examined in terms of a sustainable lifestyle as opposed to differing types of consumption. Just as consumption was described from the sociological, psychological and cultural perspective, PEBs and their influences are often examined from more integrative types of behavioural models (Jackson, 2005; Shove, 2010; Bar, Gilg and Shaw, 2011). The most popular or dominant models stem from rational choice theory, such as the Theory of Planned Behaviour (TPB) or Attitude-Behaviour-Choice (ABC) (Shove, 2010; Davies et al., 2014). These models integrate insights from research within psychology, economics and sociology where decisions are thought to be made deliberately in an effort to maximise benefits (Jackson, 2005). However, in terms of understanding the motivations behind each type of PEB, there is still a lack of consensus on the forces, which influence environmental concern, despite decades long research on consumer behaviour and the environment (Leonidou et al., 2010; Leary et al., 2014).

Leonidou et al. (2010) contend at the centre of this debate is a lack of understanding on the relationship between environmentally friendly attitudes and behaviour. The literature on attitudes and values describes PEB as altruistically motivated behaviour, or pro-social behaviour (Stern, 2000). Griskevicius et al. (2010) elaborates on this definition by applying the theory of cost signalling to environmentally friendly behaviour. Cost signalling theory, discussed in more detail in the next chapter, suggests that an individual may signal status by engaging in behaviours, which are difficult for other's to replicate (Zahavi and Zahavi, 1997; Saad and Vongas, 2009; Griskevicius et al., 2010; Sundie et al., 2011). This may include high effort behaviours, which incurs a cost to the actor, such as time or money. Griskevicius et al. (2010) thus define PEBs as a pro-social behaviour, which comes as a cost or sacrifice to the individual carrying it out. The cost or sacrifice in engaging in PEB may include the purchase of a more expensive, lower performing product, such as the Toyota Prius or the rejection of certain products or services such as air travel, which may be faster and less expensive than train travel. The cost associated with purchasing environmentally friendly products or rejecting certain consumption practices has been shown to increase social status, where the large costs of altruistically motivated behaviour are associated with an individual's ability to bear them, as identified by cost signalling theory (Griskevicius et al., 2007, 2010; Hardy and Van Vugt, 2006).

2.3.1. Status and PEBs

There have been several studies on status and pro-social behaviour, many of which utilise cost signalling theory to explain how pro-social behaviour increases status (Hardy and Van Vugt, 2006; Griskevicius et al., 2009; Buunk and Massar, 2012).

Griskevicius et al. (2010) extended this theory to conspicuous displays of green consumption. Study participants were given the option to choose a product that was considered a luxury product or a 'green' product. The green products were described as having pro-environmental qualities and were of equal price as the luxury positioned product. When status motives were activated in the experiment, as participants were told their product choices would be shared with others, a majority chose the green product over the luxury product. Griskevicius et al. (2010) attributes this to cost signalling theory, suggesting that the extent to which purchases are public versus private influences purchase decisions. When purchase decisions are public individuals will choose items that signal desirable characteristics about the purchaser to his or her immediate audience. When it comes to purchasing green goods or environmentally friendly goods, it has been shown that the purchaser is perceived as someone that is caring and altruistic, therefore granting them higher social status compared to those that do not demonstrate these same qualities (Griskevicius et al., 2010; Zabkar and Hosta, 2013).

Building on the discussion from the previous section that consumption is as much a social endeavour as it is individual, reputation has been shown to have an important role in encouraging pro-social behaviours (Milinski et al., 2002; Piazza and Bering, 2002; Penn, 2003; Flynn et al., 2006; Hardy and Van Vugt, 2006; Griskevicius et al., 2010). Striliniski et al. (2002) conducted experiments testing the impact of social pressure on conservation of public goods. They found when reputation was at stake individuals were more likely to conserve public goods. Piazza and Bering (2008) found study participants were more charitable when reputation or fear of gossip was implemented in a series of economic games. Flynn et al. (2006) discuss the implications of reputation. They argue that having a reputation as a giving or charitable person leads to status conferral among peers. Penn (2003) attributes reputational concerns and cooperation between non-relatives to indirect forms of reciprocity.

Individuals, according to Penn (2003), engage in pro-social behaviours as a result of indirect benefits bestowed upon them, whether that benefit is a better reputation or the promise of a favour in the future. As the public becomes increasingly aware of the negative impacts associated with environmental decline, there is increasing social pressure on individuals and companies alike to engage in behaviours that have less of a negative impact on the environment.

The importance of status will be discussed in greater depth in the next chapter. It is introduced here in terms of the relationship between PEBs as they enable a person to build their reputation through visible displays of PEBs. Thus, status should be considered a potential method for promoting PEBs.

2.4 Barriers to PEB / sustainable consumption

The relationship between status and PEBs described in the previous section highlights the individual and social nature of PEBs, especially when these behaviours are visible to others. However, the barriers this relationship presents must also be considered. Kollmuss and Agyeman (2002, p. 247) discuss barriers to PEBs identified by Blake (1999, cited in Kollmuss and Agyeman, 2002). Blake suggests there are three main barriers to behaviour: individuality, responsibility and practicality. Individuality is attributed to attitude. Responsibility reflects a person's belief in his or her ability to make a difference through their actions. Practicality considers the social and institutional constraints on a person's behaviour. As the field of sustainability has evolved, the literature expands on these three barriers to consumption. McKenzie-Mohr (2000) discusses barriers in terms of internal and external factors, such as lack of knowledge on a programmable thermostat, or lack of access to public transit. Shove (2010) points out UK policy suggests almost anything could be either a driver or barrier to promoting PEBs. This section narrows down the potential barriers to consumption by focusing on the three barriers proposed by Blake (1999), with consideration for the influences on consumption discussed earlier in this chapter.

2.4.1 Individuality as a barrier to sustainable consumption

Blake (1999, cited in Kollmuss and Agyeman, 2002) attributes attitudes as individual factors that act as a barrier to certain behaviours, including PEBs. Attitudes, which are defined as enduring feelings towards a person, object or issue and can be either positive or negative (Kollmuss and Agyeman, 2002). They are thought to influence beliefs and motivation towards certain behaviours and have been used in several behaviour change models. Consideration of attitudes in policy making has resulted in the use of informational campaigns to change attitudes towards certain types of behaviour, such as recycling (Shove, 2010). However evidence suggests that attitudes along with stated intentions do not always translate into behaviour or actions (Shove, 2010; Carrington et al., 2010). Furthermore, decades of research on environmental attitudes have indicated that attitudes and beliefs alone have little impact on behaviour (McKenzie-Mohr, 2000). Thus, consideration for barriers to promoting PEBs must move beyond attitudes of the individual and consider other factors, such as identity.

As discussed in Section 2.1, the field of marketing attributes identity as a core driver of the consumption of certain goods. This perspective is also used to explain the rejection of certain goods, if that good contradicts a person's perceived identity. Using Social Identity Theory (Tajfel and Turner, 1979), White and Dahl (2007) show that consumers avoid products associated with out-groups, or dissociative reference groups, especially when in public. Apple used this type of strategy in its advertising of Mac computers. The adverts presented a Mac as a young, relaxed character, while a PC was presented as an older, out-dated character. The advert appeals to consumers that wish to dissociate themselves with being perceived as old, thus motivating them to purchase a Mac computer (White and Dahl, 2007).

Wright et al. (2012) explored the notion of identity and sustainable lifestyles, including consumption. They interviewed 36 sustainability managers in global and Australian firms. They found that managers tasked with promoting sustainability experienced negative opinions from other colleagues and even a decrease in status within the organisational hierarchy. Behaviour, which moves away from mainstream consumption, is still perceived as different, 'hippie' or outsider behaviour. One interviewee compensated for this dissociation by maintaining a high level of consumption outside the workplace, he owned a large home with a pool (Wright et al., 2012). Without wider sanctions or formal acceptance of reduced consumption, individuals may resist alternative forms of consumption such as sustainable consumption, especially if it impacts their perceived identity.

2.4.2 Responsibility

The second barrier identified by Blake (1999, cited in Kollmuss and Agyeman, 2002) is responsibility. Responsibility refers to the individual's perceived ability to make a change through his or her individual actions. The literature refers to this as perceived consumer effectiveness (PCE). Perceived consumer effectiveness or PCE, is defined as the, 'degree to which consumers believe that their personal actions can benefit the environment' (Kinnear, Taylor and Ahmed, 1974, cited in Chang, 2011, p. 21). It is suggested that PCE is a useful predictor in determining behaviour, those with high PCE are more likely to demonstrate high levels of PEBs (Gilg, Barr and Ford, 2005). Conversely, individuals with a low PCE do not believe their actions will have any impact on the environment. (Chang, 2011). The extant literature reveals PCE is a strong predictor of PEBs, for example Antonetti and Maklan (2014) review fifteen studies examining PCE, as well as self-efficacy and internal locus of control. Of the fifteen studies reviewed, eleven reported PCE as a predictor or moderator of PEBs. However, it little is known as to what increases PCE, therefore it presents a barrier to wider uptake in PEBs.

PCE is often connected to the concept of perceived behavioural control (PBC) and self-efficacy (Ellen et al., 1991). Self-efficacy is related more specifically to the perceived ability to complete a task and considered an antecedent to perceived behavioural control (Antonetti and Maklan, 2014), which is a key component of the Theory of Planned Behaviour (Ajzen, 1991). PBC predicts whether or not the individual considers the desired behaviour achievable and therefore the likelihood that they will engage in that behaviour. However, empirical studies reveal inaccuracies between reported PBC and 'actual control'. These inaccuracies have led to a gap in understanding the predictive power of the TPB model and a full understanding of behaviour change, thus legitimatising further exploration of the decision-making process in behavioural research. Armitage and Connor's (2001) meta-analysis of TPB indicates factors such as perceived resources, opportunities to engage in behaviour and the ability to overcome obstacles that will lead to an increase in an individual's PBC and possibly the predictive power of the TPB model.

Consideration for the relationship between PCE, PBC and self-efficacy has led to a debate on their inter-changeability. Ajzen (1991) argues they are the same, however, others, including Bandura (1977), argue that self-efficacy is concerned more with cognitive perceptions of control based on internal factors, as opposed to changing attitudes and norms. PBC is thought to be more concerned with external factors. Antonetti and Maklan (2014) further identify that PCE And self-efficacy are often viewed as the same. They differentiate between self-efficacy and PCE by stating that PCE reflects an individual's sense of empowerment to engage in a behaviour and therefore is a greater predictor of behaviour than self-efficacy. However, Ellen et al. (1991) argue that PCE is domain specific and cannot be used to predict general PEBs. To further support the notion that self-efficacy is an antecedent to PCE, Leary et al. (2014) suggest PCE is a type of efficacy belief. Self-efficacy has been shown to play an important role in the decision to undertake more general behaviours (Bandura, 1977), especially when individuals perceive themselves to be capable of dealing with the risks associated with a new behaviour.

Bandura (1977; 1994) developed the theory on self-efficacy. He defines self-efficacy as the beliefs a person has about their capabilities achieve a certain level of performance on events that impact their lives. It is thought that self-efficacy determines how a person will think, feel, and motivate himself or herself to engage in certain behaviors. Bandura, argues there are three sources for achieving high perceived self-efficacy: perseverant effort, social modeling and social persuasion. Overcoming setbacks and learning success through sustained efforts achieve the first source, perseverant effort. The second is by observing the success of social models. The key is that the person must also believe he or she is similar to the social model in order to experience vicarious success. The greater the perceived similarity between the person and the social model, the more persuasive the model's successes and failures are. People will also seek out social models that possess skills or competencies they aspire to have. These social models transmit to observers. The third source of perceived self-efficacy is social persuasion. When people are told they possess the capabilities to accomplish certain tasks repeatedly, over time they begin to believe it. This source is much more difficult to instill high self-efficacy beliefs, however it is much easier to undermine perceived self-efficacy through social persuasion than to promote it, for example, bullying. Individuals whom are told repeatedly they lack the ability to do something are more likely to believe it compared to being told they have the ability to do something (Bandura, 1994).

Despite the on-going debate on the relationship between self-efficacy, PCE and PBC in pro-environmental behaviour research, it has been agreed upon that high levels of self-efficacy, or efficacy beliefs are strong related to the uptake in PEBs (Ellen et al., 1991; Antonetti and Macklan, 2014; Leary et al., 2014). Whereas low feelings of self-efficacy are reflect scepticism towards an individual's ability to make a significant positive change on the environment (Chang, 2011).

2.4.3 Practicality

Practicality is attributed to social and institutional constraints on behaviour, such as social norms (Kollmuss and Agyeman, 2002). Social norms are perceived rules that either encourage or prohibit certain behaviours (Jackson, 2005; Cialdini and Goldstein, 2004). These norms are also thought to contribute to the societal influence in consumption as Cialdini and Goldstein (2004) identifies a range of behaviours thought to be influenced by social norms. This includes recycling behaviours, littering and tax evasion.

A study conducted by Goldstein et al. (2008) explored the different types of message that can motivate hotel guests to reuse their towels during their stay in an effort to encourage pro-environmental behaviour. The study identifies the use of different types of messages to appeal to peoples' identities as environmentalists. The results of the study found that broader messages resulted in lower participation rates (Ibid.). The observed participation rate for the standard environmental message was 35.1% out of a total of 433 cases compared to messages about the behavior of individuals staying in that particular room (Ibid.). Based on their findings, Goldstein et al. (2008) suggests pro-environmental campaigns may be more effective through the use of descriptive normative messages: messages that appeal not only to an individual's pro-social behavior, but are also married to the immediate surroundings.

Although norms have been shown to encourage a variety of behaviours, norms have also been shown to prohibit certain behaviours, especially within a social hierarchy, where rank often dictates behaviour. One study, by Whyte (1981, cited in Bothner et al., 2012) exemplifies the relationship between behaviour, norms and visibility, which explores how norms constrain behaviour based on social hierarchy. Whyte (1981, cited in Bothner et al., 2012) studied how the impact of rank in a street gang affected bowling scores. The bowling scores of the street gang closely correlated to their corresponding rank within the gang. However, when a low-status gang member bowled alone, he repeatedly scored higher than the group leader's earlier recorded score (Bothner et al., 2012). When the lower status gang members' behaviours were no longer visible to the rest of the gang, the constraints of the imposed social norms were no longer relevant. Social norms therefore either promote or constrain certain types of behaviour. If PEBs are contradictory to social norms they will be more difficult to promote.

2.4.4 The impalpable concern of climate change

Another barrier to encouraging PEBs is a reported disconnect between behaviour and consumption and the changing climate (Griskevicius et al., 2012; Webb, 2012). Griskevicius et al. (2012) attribute the disconnect between consumer behaviour and slow moving climate change with an adaptive mechanism which discounts the future and fosters a disregard for impalpable concerns. Given that most capitalist societies do not hunt their own food or make their own consumer goods, there is no visual or direct signal of their impact on the environment leading to a shallow understanding of the impacts of behaviour (Webb, 2012). One theory that helps clarify the issue is Temporal Construal Theory (Liberman and Trope, 1998). This theory suggests that psychologically distant impacts become more abstract as the distance or time increases. In their study on Temporal Construal Theory, Liberman and Trope (1998) found that study participants referred to distant activities in terms of abstract goals or aspirational behaviours (i.e. maintaining a clean house), whereas near term activities were more concrete and specific (i.e. hoovering the lounge). In the instance of climate change where impacts from human consumption take decades to realise become much more difficult for most individuals to incorporate in short-term goals, such as consumption or PEBs.

This section identified the critical characteristics of PEBs, including the perceived barriers to encouraging them more widely, especially in the instance of reducing consumption. Despite the difficulty in defining PEBs and the lack of consensus on how to effectively promote them, the field of marketing is thought to provide useful tools for encouraging PEBs. The next section describes how marketing has encouraged PEBs and the models used in doing so.

2.5 Overcoming barriers to sustainability through marketing

A contributing factor that makes promoting PEBs through traditional marketing techniques difficult is the complexity of consumer behaviour and consumer research. It is from this perspective that the marketplace exists as a system that promotes certain types of consumption, where marketing messages promote increasing levels of consumption (Simms and Potts, 2012). According to Patsiaouras and Fitchett (2009) the field of consumer research has experienced competition between two dominant logics, psychology and sociology. Consumer research continues to struggle to unify itself with a cohesive critical discourse (Leonidou et al., 2010). This lack of unity is even more apparent when applied to the context of sustainability, however this gap is also thought to present an opportunity for better understanding of PEBs (Essoussi and Linton, 2010; Wells et al., 2011; McDonagh and Prothero 2014).

Within the wider discourse of issues tied to sustainability, consumer demands play an important role in both the problem and the solution. Marketing professionals have influenced, and to some exacerbated consumer demand, therefore making the role of the consumer a central focus in the discussion on sustainable consumption, as opposed to the producer (Holt, 2002; Peattie and Peattie, 2009; McDonagh and Prothero, 2014). Marketing sustainability is defined as the 'process of creating, communicating and delivering value to customers in such a way that both natural and human capital are preserved or enhanced throughout' (Martin and Schouten, 2011). According to the postmodernist view, the role of the consumer has transitioned from providing value to the marketplace to taking value from the marketplace (Firat and Venkatesh, 1995). Sustainable marketing in regard to the consumer has largely focused not only on the role of the individual within a larger complex system of production and growth, but also on individual attitudes, values and beliefs

(McDonagh and Prothero, 20104). This section will describe several of the more dominant models of behaviour change utilised in social marketing and sustainable consumer research and then provide examples of social marketing from the literature.

2.5.1 Values-based models of behaviour change

Given the problem of climate change from human consumption, consumer researchers have sought to develop integrative models for predicting consumer behaviour (Wells et al., 2011). Key articles within marketing and consumer research by Leonidou et al. (2010), Wells et al. (2011) and McDonagh and Prothero (2014) identify value-based models as the most popular models used in pro-environmental consumption research. Value-based models tend focus on the relationship between attitudes and behaviours (McDonagh and Prothero, 2014). Values, in this instance, are defined as enduring beliefs thought to be stable constructs to help evaluate personal attitudes, beliefs and behaviours (Krystallis et al., 2012). Thus, it is perceived that values may be useful predictors for decision-making. Value-based models, which are argued to be dominant in sustainable behaviour research, stem from rational choice theory or models (Moloney et al., 2010; Davies et al., 2014). Rational choice theory argues that individuals make decisions based on logical considerations of the costs and benefits of different behavioural outcomes. The individual will make behavioural decisions based on the perceived benefits of that behaviour (Moloney et al., 2010). In their review of the literature on attitudes and behaviours McDonagh and Prothero (2014) go on to say that this arm of consumer research will remain a crucial component of marketing moving forward.

Some of the more prominent value-based models include the Values and Frames model by Tom Crompton (2010), which considers intrinsic and extrinsic values to motivate and encourage environmentally friendly behaviours. This Values and Frames model is based on the Values Theory developed by Schwartz (1992), which establishes ten universal values thought to be compatible yet motivated by opposing elements. The ten universal values are displayed in a circumplex, where each component is equally spaced within a circle (Moloney et al., 2010; Crompton, 2010). These universal values include universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation and self-direction. Schwartz's theory (1992) assumes that behaviour will be positively correlated with its corresponding value as well as the neighbouring value in the circle.

Crompton (2010) argues that values are an important driver of behaviour, but recognises behaviour is not always consistent with dominant values. In terms of understanding and promoting pro-environmental behaviour, the model attempts to predict scenarios under which certain individuals will engage in pro-environmental behaviour. For example, the model suggests individuals that care for the environment and take significant steps towards protecting the environment most likely is motivated by benevolence, tradition and universalism (Crompton, 2010). Messages through social marketing that appeal to these intrinsic values are thought to promote pro-environmental behaviours among people whose value systems are dominated by benevolence or tradition. It is thought that by engaging in this type of behaviour and fulfilling the intrinsic value of benevolence brings satisfaction to the individual (Leonidou et al., 2010). Following the logic of rational choice, the self-satisfaction an individual achieves by fulfilling an intrinsic value, such as benevolence through pro-environmental behaviour, has greater benefits than the alternatives.

In an effort to put theory into practice, the WWF created the Common Cause Report, authored by Tom Crompton. The report goes into great detail about how a person's values will drive their behavior in a specific direction in order to achieve their specific life goals (Crompton 2010). Through the use of sociology, psychology and economics it explores common life goals all humans possess. The report discusses the importance of sending the right message to different audiences about climate change by taking a value-based approach to communicating with the public (Crompton 2010). Sending the right message and having the ability to communicate is an important factor for getting the public engaged in climate change, but the research conducted by these organizations still lacks appropriate information on the driving forces behind public behavior regarding climate change.

Another value-based model includes the value-belief-norm (VBN) theory (Stern, 2000), a model that links theories from social psychology such as value theory, norm-activation theory and the New Ecological Paradigm. This model builds upon these theories by creating a causal chain between personal values, beliefs about the environment, social norms on PEBs and behaviour (Stern, 2000). Stern (2000) explains that the model predicts an individual will engage in PEBs when he or she believes environmental conditions threaten their individual values and he or she believes they can take action to reduce that threat. Although Stern and colleagues (Stern et al., 1999) were able to find empirical evidence to support their VBN model, they further concluded that neither existing models nor their own, were able to predict a sole indicator for participating in PEBs. Wells et al. (2011) goes on to say that many researchers have disregarded the VBN model for the more popular Theory of Planned Behaviour. The Theory of Planned Behaviour (TPB) (Ajzen, 1985) assumes a person's attitudes towards a specific behaviour will impact the decision to act upon behavioural intentions (Manetti et al., 2004).

The TPB has been a popular tool for examining pro-environmental behaviours particularly because it can be extended to consider other factors thought to influence PEBs (Wells et al., 2011). The factors thought to influence PEBs include, 'goals, attitudes, social identity, perceived self-efficacy and situational forces' (Wells et al., 2011, p. 809). Poortinga et al. (2004) point out that using values to understand and predict environmental behavior is too limited and behavior change is much more complicated than originally thought, especially when trying to create effective public policies for pro-environmental behavior. This includes the notion that values change over time (Hards, 2011). The main concern with using value-based models such as the TPB is that values are thought to change over time; decision-making is artificially isolated (Carrington et al., 2010); and value-based models tend to focus on a specific type of behaviour such as recycling, as opposed to generic PEBs (Wells et al, 2011).

The TPB is often criticised for making the assumption that the decision-making process occurs rationally and without strong consideration of cognitive processes (Ajzen, 2011). The model concentrates on a very controlled decision-making process where behaviours are goal-directed and influenced by self-regulation (Ajzen, 2011). The model assumes perfect, controlled conditions for decision-making, without consideration for environmental factors (Carrington, et al., 2010). Ajzen (2011) argues how an individual arrived at his or her beliefs is not important, it is the process by which the decision to act that is rational, not the arrival at the beliefs behind the behaviour. However, even Ajzen (2011) acknowledges that intentions can be poor predictors of behaviour, particularly when considering perceived ability to carry out a behaviour (Olson and Maio, 2003)

The TPB has demonstrated success in predicting behaviour related to health, academic achievement and conservation habits (Mannetti et al., 2004). However, Armitage and Connor (2001) critique previous analyses of TBP studies and suggest the evidence purporting its effectiveness is inaccurate and based largely on errors in sampling and scope. For instance, Ajzen's (cited in Armitage and Connor, 2001) meta-analysis exhibited average multiple correlations between attitude, subjective norms and PBC with intentions to be R = 0.71 for 19 correlations. However, as Armitage and Connor (2001) point out, the analyses used limited data sets, including unpublished studies and only considered the direct antecedents, behaviour and intentions. Beyond the issue of limited sample size, studies involving TPB often rely on self-reported responses on attitudes and subjective norms, which are known to be unreliable as individuals provide answers which they perceive to make them appear more pro-social (Armitage and Connor, 2001; Carrington et al., 2010). Beck and Ajzen (1991) attempted to correct for self-presentation biases by including a social-desirability scale in their studies, however, Armitage and Connor (2001) found this to have very little effect on observed behaviour.

2.5.2 Social Practice Theory

In an effort to move away from behaviour change models based on rational choice, several researchers have examined sustainable consumption using social practice theory (Shove, 2010; Spaargaren, 2011; Davies et al., 2014). This theory is based on Giddens' (1984) structuration theory, which argues that everyday practices are interconnected with longitudinal changes in social institutions (Jackson, 2005; Davies et al., 2014). Social practice theory when applied to sustainable consumption removes focus and responsibility away from the individual and focuses more on how to create change within social institutions. For instance, the CONSENSUS project, which took place over a five-year period among multiple institutions in Ireland, examined consumption within specific social practices in everyday life. Researchers explored the everyday practices of commuting, heating, washing and eating, as well as the impact of existing policies. In the instance of commuting, the researchers suggested existing policy does not account for the complexity of practices surrounding everyday commuting. Transportation to and from work is more than just travelling from point A to point B. There are children to drop off and pick up, shopping to get done, dry cleaning to tend to and many other errands that people include in their daily commute (Heisserer, 2014). Existing policies that aim to promote public transport fail to fully consider these additional functions of daily commuting.

Consideration for social practice further argues that individuals are influenced by the behaviour and actions of other people (Spaargaren, 2011). They often do not come to behavioural decisions on their own, they rely on social information or cues as to what are the correct behaviours to engage in. This is supported by evidence discussed previously in Section 2.2 on conspicuous consumption. Shove (2010), Spaargaren (2011) and Davies et al. (2014) argue that the dominant paradigms for behaviour change often used in social marketing and by policy makers would be more effective if they would consider the relationship people have with consumption within the various domains of everyday life.

2.6 Social marketing PEBs

Marketing specialists often utilise the tools of traditional marketing techniques to influence and encourage socially desirable behaviour, through social marketing (Andreasen, 1995; Osterhus, 1997; Corner and Randall, 2011). Social marketing aims to de-market socially undesirable behaviour by addressing the costs and benefits of the desired behaviour while also considering the attitudes, values and beliefs of the target audience (Andreasen, 1995; Collins et al., 2003; Jackson, 2005; Corner and Randall, 2011).

Early efforts to address changes in consumption have relied largely upon social marketing techniques, including informational campaigns incorporating models from the health field or economic instruments such as tax cuts, as a means by which to incentivise minor changes in people's lifestyles (Collins et al., 2003; Hymel et al., 2006; Peattie and Peattie, 2009; Corner and Randall, 2011). Analyses of current techniques have evinced small changes, however, these changes have not been widespread or significant enough to reduce the negative human impact on the environment (Peattie and Peattie, 2009; Barr et al., 2011). The largest evidence for this is demonstrated by the earth's decreasing ability to keep up with global production and consumption (Peattie and Peattie, 2009; Corner and Randall, 2011; McDonagh and Prothero, 2014). This is further supported in Hargreaves' (2012) analysis of social marketing campaigns to encourage PEBs. He explored large-scale informational campaigns in the UK such as *Earth Begins at Home* and *Are You Doing Your Bit?* Hargreaves (2012) states that despite growing sophistication of behaviour change models there is little evidence of significant changes in public behaviour. This may be attributed to the complexity of PEB and its position within the domain consumer culture (Stern, 2000; Hargreaves, 2012; McDonagh and Prothero, 2014).

McKenzie-Mohr (2000) analyses the use of social marketing to promote behaviour change. For example McKenzie-Mohr (2000) cites resulted in a three to four fold increase in household energy efficiency when energy auditors from Pacific Gas and Electric used psychological tools, such as prompts and commitment to change consumer behaviour. McKenzie-Mohr (2000) suggests community-based social marketing campaigns have greater success in promoting PEBs, especially when they apply tools from psychology. Community-based campaigns should use the following steps: select one activity to promote, for instance recycling or reduced water consumption; identify the specific barriers to that activity; design a strategy to overcome those barriers; pilot the strategy with a small group within the community; and lastly evaluate the impact of the program after it has been fully implemented (McKenzie-Mohr, 2000, p. 532). He cites two examples in which this type of community-based social marketing was successful.

The first describes a small region outside of Toronto, Canada that aimed to decrease water usage for lawns among community members. Once barriers were identified the homes within the community were divided into two groups. One group received information packets about water usage and conservation. The second group was visited by student cyclists, who spoke to home owners about water conservation, gave them a water gauge and prompts to place by their outdoor water faucet reminding them to consider whether or not it rained recently before watering their lawns. This group was also asked to sign commitments to reduce their water usage. Through direct observation, results of the campaign revealed that the group visited by student cyclists reduced their water consumption by 54% compared to the baseline measurements taken prior to the social marketing efforts. The group that received information packets only were found to have increased their water consumption by 15% compared to baseline observations (McKenzie-Mohr, 2000).

The second study reviewed by McKenzie-Mohr (2000) aimed to increase the purchase of products made from recycled content in Seattle, Washington. After identifying five barriers to purchasing products made with recycled materials, the campaign designers decided three of the five could be overcome; these included low awareness, cynicism towards manufacturers claims and difficulty finding the products. The two barriers that could not be overcome were perceptions on high cost and low performance compared to traditional products. The community-based campaign used traditional media combined with in-store advertising to raise awareness of the recycled content products. Shelf prompts further helped consumers locate the recycled content products. Analysis via electronic inventories of purchased goods revealed a 27% increase in purchases of recycled content products during the monthly promotion.

Although these examples show how social marketing can be successful, there is an inherent problem with these approaches, not only in that they focus on small changes in daily routines or lifestyles, which are meant to be ‘painless’, but also they only focus on one activity, and for a brief period of time (Thøgersen and Crompton, 2009; Corner and Randall, 2011). Thøgersen and Crompton (2009) highlight the issue that the small changes promoted through many social marketing campaigns are not ambitious enough to reach the desired targets established within the international community for mitigating climate change. Further critique of these measures indicate that because they are often focused on one activity and run for a limited time, there is little to no knowledge of long-term impacts related to social marketing messages aimed to increase PEBs (Corner and Randall, 2011).

Additionally, reported successes derived from social marketing campaigns often overlook the legislative measures that coincide with the de-marketing of anti-social behaviours. For example, within the US the 'Truth' marketing campaign that ran in the state of Florida is regarded as a highly successful social marketing campaign for de-marketing smoking in the youth market (Peattie and Peattie, 2009; Abroms and Maibach, 2008). Practitioners behind the campaign sought to understand the attitudes and behaviours of young smokers before developing marketing messages. The campaign developers started with hundreds of interviews of young people to understand why young people continue to smoke despite knowing the health risks (Peattie and Peattie, 2009). What practitioners found was that young smokers wanted access to information in a non-judgemental way, combined with humour so they could make their own decisions about smoking. The most telling information from the research for the campaign for the practitioners was that changing this type of behaviour required overcoming a social barrier as opposed to an economic one. However, stringent taxes and fines are imposed to make smoking less attractive to people under the age of 18 (Collins et al., 2003). Comparatively, many people when asked why they do not engage in PEBs often state economic reasons as opposed to social ones (Carrington et al., 2010). Furthermore, in the context of sustainable behaviours, social marketing campaigns aimed at promoting PEBs often lack the policies needed to support widespread changes in consumption (Lucas et al., 2008; Jackson, 2005; Webb, 2012).

When applying social marketing to general consumption, governments and non-governmental organisations alike face a more difficult challenge. Within marketing the consumption of goods is theorised to go beyond fulfilling basic needs of survival, rather, it is viewed as a symbolic representation of the self, culture and, ultimately, status (Belk, 1988; McCracken, 1986; Ahuvia, 2005; Wattanasuwan, 2005; Sundie et al., 2011; Griskevicius et al., 2010). Thus, pursuing a reduction in consumption, while ignoring the issue of economic growth and stability, presents a much more difficult challenge to the individual. Promoting a decrease in consumption no longer becomes solely an issue of comfort and quality of life, but of a perceived loss in identity, cultural meaning and status (Wattanasuwan, 2005; Sundie et al., 2011; Chaudhuri and Majumday, 2006). As social marketing moved beyond informational campaigns, practitioners and researchers alike sought out useful behaviour change models to help construct wide reaching campaigns to engage the public in changing behaviour. Putting theory into practice, sustainable marketing turned its focus on understanding intrinsic motivations for engaging in socially responsible behaviours such as PEB (Leonidou et al., 2010).

One aspect of behaviour change models frequently applied to social marketing is social norms. As discussed in Section 2.4.3, norms were described as a barrier to promoting a wider uptake of PEBs. It was further discussed that norms have the power to both promote and constrain behaviour. This has been explored within the literature through the use of normative messaging. The following section highlights successful examples of the influence of normative messaging in social marketing.

2.6.1 Injunctive and descriptive normative messaging

While social norms may inhibit an individual's desire to adopt new behaviours, they can also encourage behaviour through normative messaging. Socially desirable behaviour is often activated via social marketing campaigns, which aim to communicate socially acceptable behaviour through the use of both descriptive and injunctive norms (Cialdini, 2003; White et al., 2013). Descriptive norms describe behaviours that a large portion of the population commonly engage in (Cialdini, 2003; White et al., 2013). Injunctive norms describe socially acceptable behaviour that others should engage in (Cialdini, 2003; White et al., 2013). Cialdini (2003) posits that social marketing campaigns often use descriptive norms but fail to recognise the benefit of including injunctive norms. This dichotomy is exemplified by Cialdini (2003) in his description of a popular public service announcement that ran on US television that during the 1970s and 1980s. The advert showed a Native American canoeing down a river that was heavily polluted. A single tear ran down his face and the slogan read, 'People start pollution, people can stop pollution' (Cialdini, 2003, p. 105). The visualisation of the polluted river acts as a descriptive norm, which inadvertently indicates that pollution is socially acceptable. The message fails to impress upon the viewer that although pollution is a common problem, it is socially undesirable. Cialdini (2003) suggests presenting undesirable behaviour as a descriptive norm may actually increase the likelihood that others engage in it, as opposed to decreasing it.

Further contributing to the literature on injunctive and descriptive norms, a study conducted by Schultz et al. (2007) tested how descriptive and injunctive norms can work together not only to increase desirable behaviour, but also to prevent negative spill over effects. Thøgersen and Crompton (2009, p. 143) define 'spillover' as the increased motivation to adopt related (PEBs) behaviours after the adoption of initial, smaller step behaviours. When the desire to take on additional PEBs increases this is known as positive spillover. If the desire to adopt additional PEBs decreases, this is known as negative spillover.

In New Mexico 287 households participated in a study where the energy consumption was monitored for two weeks. At the end of the two weeks some households received descriptive norm messages stating how their energy consumption compared to the average within the neighbourhood. Other households received a message with a descriptive and injunctive norm, informing them how their energy usage was compared to the neighbourhood average and a smiley face or sad face to indicate whether or not their energy consumption was approved of (Schultz et al., 2007). As a control, the remaining houses received messages about their energy consumption over the two-week period.

The results showed that households that received descriptive norm messages stating that they were consuming less than the average house then increased their energy consumption, while houses that consumed above the average then decreased their energy consumption (Schultz et al., 2007). Households that received messages that their energy consumption was below average and also received a smiley face continued to consume below the average (Schultz et al., 2007). By sharing energy use information through normative messaging the researchers will able to make an inconspicuous form of consumption more conspicuous to others. Marketing materials that not only inform consumers what behaviour other people typically engage in, but also inform what behaviours should be adopted, can prove to be an effective technique for encouraging sustainable behaviours, especially private-sphere behaviours within the household. What this study further highlights, yet the authors do not discuss, is the notion of competition between households. By making private consumption behaviours conspicuous to others it activated not only a desire to engage in similar behaviours, but to do better than the average.

White et al. (2013) took this work further and conducted studies to determine when normative appeals are at their most effective. They asserted that individuals would respond differently to injunctive or descriptive norms depending on whether or not the collective self or individual self is activated. The studies focused on grass recycling and composting behaviours. White et al. (2013) ultimately found that both descriptive and injunctive norms were effective in motivating recycling behaviours when marketing messages activated the collective self. Messages were sent to households indicating the collective self by using language such as 'our' or 'we' combined with descriptive norm messages, such as 'join other members in your community in grasscycling' (White et al., 2013, p. 82). Injunctive messages stated, 'your neighbours want you to grasscycle' (White et al., 2013, p. 82). The researchers measured the amount of grasscycling collected at each household before and after the messages were received. The results demonstrated that when the collective self was activated through 'we' messages, both descriptive and injunctive norms led to an increase in grasscycling (White et al., 2013). The work by White et al. (2013) reinforces the research conducted by Schultz et al. (2007).

Both studies demonstrate the effectiveness of descriptive norms on behaviour, especially PEBs. They utilise descriptive normative messaging to make recycling behaviours more conspicuous. Yet, there is an element of competition between neighbours that is not addressed. As demonstrated in the study by Schultz et al. (2007), when households learned they were consuming more than others they decreased their consumption, as a way to 'keep up with the Joneses'. Similar behaviour was demonstrated by households that began consuming more energy after they learned they were consuming less than their neighbours (Schultz, 2007). This evidence suggests that by making private-sphere behaviours, such as energy consumption, conspicuous through normative messaging, competition is elicited among neighbours to change their energy consumption behaviour.

The studies by White et al. (2013) and Schultz et al. (2007) focus on the positive use of normative messaging in encouraging sustainable practices of consumption. What is missing is the notion of identity as discussed in the previous section. Several studies draw in the notion of identity with norms and consumption demonstrating how visibility leads to greater conformity. A study by Wang et al. (2012), in which they explored the consumption habits of individuals that typically isolate themselves from social groups. They referred to the study subjects as 'lonely consumers', where they predicted that the lonely consumer would prefer minority-endorsed products compared to their more social counterparts, who prefer majority-endorsed products. In the event of an individual's decision being open to public scrutiny, that individual may be more likely to conform to the majority. The study results aligned with the predictions made about visible consumption decisions: when a lonely consumer was asked to choose a piece of artwork to be viewed in a common area, that individual chose a print that previously had received a positive feedback by a majority of students.

The study conducted by Goldstein et al. (2008) introduced in section 2.5.1, explored the different types of message that can motivate hotel guests to reuse their towels during their stay in an effort to encourage green behaviour. The study distinguishes different types of messages to appeal to consumer identities as environmentalist, citizen, hotel guest, and man or woman. The research by Goldstein et al. (2008) found that broader messages resulted in lower participation rates such as someone who identifies themselves as a person that cares for the environment. The highest rate of towel reuse rates were observed when messages placed in the hotel bathroom were specific to the immediate surroundings, activating the current identity of hotel guest. While studies using normative messaging have shown that both descriptive and injunctive messages are effective tools in changing behaviour, the studies by Goldstein et al. (2008), Wang et al. (2012), and White et al. (2013) all demonstrate the importance of both visibility and temporal identity which can be further applied to social identity theory, introduced in section 2.5.1 (Tajfel and Turner, 1979).

2.7 Summary of sustainable marketing

This chapter initially discussed the main problem of climate change as a result of human consumption. The chapter further discussed three main perspectives on the drivers of consumption, sociological, psychological and cultural. Next, the chapter examined the marketing perspective on human consumption. It further described the pitfalls of commonly used value-based models, such as the theory of planned behaviour for encouraging sustainability. The chapter also discusses the benefits from moving away from these types of models in an effort to consider alternative factors for predicting and changing behavioural intentions. The importance of norms and normative messaging was also explored as well as the failure to fully combine these messages with existing models and to make pro-social behaviours more visible. The next chapter introduces evolutionary psychology, the conceptual framework for this thesis, as a unified framework for better understanding consumer behaviour. It discussed the foundations of the discipline as well as the core criticisms.

Chapter 3: Consumer behaviour from the evolutionary perspective

The aims of this chapter are:

- To present the foundations of evolutionary psychology.
- To explore theories on status from the evolutionary perspective.
- To present different perspectives on status.

The previous chapter examined existing methods and theories for encouraging PEBs. It argued that existing value-based models do not fully explain how and when a person engages in PEBs. This chapter introduces the foundations of evolutionary psychology as a theoretical framework, which may help in predicting and understanding how hierarchy negotiation tactics may be used to increase positive spillover effects of PEB engagement. The cognitive influences in behaviour from the evolutionary psychology perspective are considered to be adaptive mechanisms. One such adaptive mechanism is the desire for relative status within a peer group. From this perspective, as people navigate social hierarchies there is a subconscious desire to appear more socially desirable or more pro-social to others, which leads to potentially higher status (Carrington et al, 2010; Griskevicius et al, 2012). This chapter discusses the core theories surrounding the notion of status to explain why status and thus the motivation for status is important. Additionally, this chapter explains the social structures that influence the development and conditions for status by examining how social hierarchies and status emerged through group living. It is further discussed why status became important and how it can be achieved through a variety of tactics

Consumption and its ability to build identity and demonstrate culture and status has been examined across disciplines, including marketing, psychology, personality, organisational behaviour and economics. These disciplines, according to evolutionary psychologists have managed to explore and gain an understanding of human behaviour at the proximal level (Hawley, 1999; Hardy and Van Vugt, 2006; Griskevicius, et al., 2010). The proximal level describes how consumption fulfils a greater need than simply survival, along with identifying what behaviours have emerged from the marketplace; yet there still exists an inability to identify and describe the way these behaviours have manifested in the way that they have at the ultimate level (Saad and Gill, 2000; Saad, 2009; Griskevicius et al., 2010). This is particularly critical when considering that consumer behaviour is often impulsive and irrational (Collins et al., 2003). The dilemma of understanding consumer behaviour at the ultimate level has led to the rise in acceptance of Evolutionary psychology (EP) for examining behaviour.

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3.1 Foundations of evolutionary psychology (EP) and behaviour

Evolutionary psychology (EP) broadly emerged with the publication of Darwin's *On the Origin of the Species* in 1859 and further developed as a separate discipline after the advancement of sociobiology in the 1970s (Buss, 2005, 2007). EP aims to understand why behaviour manifests itself as it does in today's world, where behaviour is the ultimate result of a mind that is a product of natural selection (Saad and Gill, 2000; Buss, 2007). Natural selection occurs via three main steps: variation, selection and inheritance. Thus, present day human beings and ultimately their behaviours are viewed as a result of variation among the species, sexually selected traits and inheritable characteristics of successful survivors (Saad and Gill, 2000; Buss, 2007). The evolutionary approach to understanding behaviour aims to shed light on some of the behaviours many scholars deem to be irrational, or unexplainable by rational choice theory (Davies et al., 2014).

3.1.1 Behaviour as an adaptive mechanism

Evolutionary psychology (EP) suggests that the present-day human brain developed to solve reoccurring problems faced by humans during the Environment of Evolutionary Adaptedness (EEA) by taking in small pieces of information at a time (Tooby and Cosmides, 2005). Thus behaviour is thought to be motivated by the problems encountered 1.7 million years ago and not the problems humans face today (Tooby and Cosmides, 2005; Buss, 2007; Derksen, 2010). These problems, often referred to as domain-specific problems, consist of coalition formation, mate choice and retention, self-protection, parental care and status, summarised in Figure 3.1 (Buss, 2005). It is important to note, however, that although these problems are re-occurring, it is not implied here that these adaptive functions aimed at solving them are pre-determined by nature. Instead, these behaviours are viewed as a default setting that may take over when an individual needs to save mental energy for higher order behaviours. When the brain is preoccupied these adaptive traits can take over (Griskevicius et al., 2009). Adaption is defined here as, 'an inherited and reliably developing characteristic that came into existence through natural selection because it helped solve a problem of survival or reproduction during the period of its evolution' (Buss, 2007, p. 39). Thus the human mind, behaviour and our ability to survive is constantly evolving and adopting over time.

Survival applies to both the short-term survival of the individual and the long-term survival of one's genes as they are passed on and improved through valuable mate choice and thus improved physical design or fitness (Buss and Kenrick, 1998). The term 'fitness' is often used by evolutionary biologists and psychologist, and is classically defined as, 'the extent to which an organism is adapted to produce offspring in a particular environment' (Saad and Vongas, 2009, p. 81). Inclusive fitness refers to this classical definition of fitness and its effects on close genetic relatives (Buss and Kenrick, 1998). An organism demonstrating inclusive fitness is thought to have adapted certain features from genetic relatives that ensure survival (Buss and Kenrick, 1998). The traits that demonstrate fitness in humans may include those associated with physical fitness, but may also include social intelligence or the ability to form cooperative alliances and negotiate hierarchies, which allow for access to resources necessary for survival (Buss and Kenrick, 1998).

To promote survival Penn (2003) asserts the human mind has developed five adaptive tendencies to respond to domain-specific problems. They include the following: 1) the propensity for self-interest, especially as it relates to reproductive selection and survival; 2) the desire for relative status; 3) a proneness to unconsciously copy others; 4) a tendency to discount the future; and 5) a disregard for impalpable concerns.

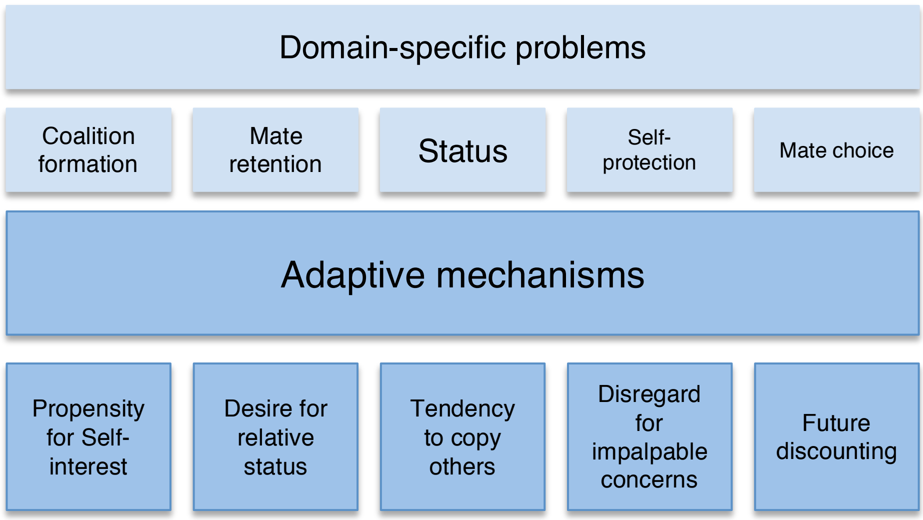

Figure 3.1: Domain-specific mechanisms and adaptive problem solving functions. This diagram summarises the domain-specific mechanisms identified by Buss and Kenrick (1998) and Buss (ed.)(2005). It also includes the problem-solving adaptive functions described by Penn (2003).

By understanding these problems and the corresponding adaptive solutions from the evolutionary perspective, evolutionary psychologists suggest it is possible to design novel approaches to marketing messages (Saad and Gill, 2000; Griskevicius et al. 2010; Griskevicius et al., 2012). For example, the study by White et al. (2013) described in section 2.9.1 demonstrates the use of messages to appeal to either the collective self or individual self when paired with injunctive or descriptive normative messages. From the EP perspective the reason recycling rates increased when the collective self was activated when combined with descriptive normative messages (describing what other people are doing), could be attributed to self-interest through reciprocal altruism. Reciprocal altruism refers to cooperation with non-relatives and is posited to be a function of the adaptive trait propensity for self-interest. This is due to the mutual benefit cooperation is thought to provide. A person that performs an act of altruism for a non-relative is under the impression the favour will be returned in the future (Trivers, 1971; Griskevicius et al., 2012). The next chapter discusses reciprocal altruism in more depth, however it provides a good example of how marketing messages can appeal to adaptive mechanisms such as self-interest.

3.2 Criticism of evolutionary psychology

While those that use evolutionary psychology (EP) perceive it to be a unifying framework for identifying and understanding behaviour, the discipline is not immune to criticism. Much of the criticism is based on what many evolutionary psychologists describe as misconceptions and misunderstandings of the core epistemology (Buss, 2007; Saad, 2008; Hagen, 2005). The three common misconceptions are that EP suggests behaviour is genetically determined; behaviour cannot be changed if it is an evolved trait; and, current behavioural mechanisms are optimally designed (Buss, 2007; Griskevicius et al., 2012; Saad, 2008). Further criticism refers to the field of EP as reductionist, non-falsifiable, dismissive of culture and sexist. Critics suggest that EP assumes behaviour to be genetically pre-programmed (Siegert and Ward, 2002). This stems from the emergence of Dawkin's (1976) notion of the selfish gene, which describes the increasing frequency of desirable genetic traits (Hagen, 2005).

According to Hagen (2005), the selfish gene described by Dawkin is, ‘just a metaphor for the modern version of natural selection based on changes in the frequency of genes’ (2005, p. 147). Although EP argues that behaviour is derived from evolved adaptive traits, it is the presence of these traits that allows for certain behaviours to occur in response to environmental stimuli (Buss, 2007; Saad, 2008); for example, callus formation on skin (Buss, 2007). Calluses are not genetically predetermined to appear without environmental input. They are the result of an adaptive trait that recognises skin sensitivity to repeated friction. When the skin experiences repeated friction, new skin cells are formed to protect the skin (Buss, 2007). From the EP perspective, it is construed that by obtaining knowledge of the adaptive mechanism, such as the skin's ability to form calluses or the desire to eat high calorie foods, the environmental stimuli that catalyse these adaptations allow for behaviour to be changed (Buss, 2007; Saad, 2008; Griskevicius et al., 2010).

3.2.1 The central criticism of EP

Gannon (2002) states that the key criticism of EP is its inability, as a science, to produce refutable assumptions, theories or hypothesis. Critics refer to EP as a method of fabricating plausible explanations for behaviour based on speculation and unproven evidence - termed 'just-so stories' (Patsiaouras and Fitchett, 2009; Saad, 2008).

Patsiaouras and Fitchett (2009) and Saad (2008) respond to this criticism by describing the importance of a rigorous framework for establishing theory by Tooby and Cosmides (1992) by conducting an evolutionary functional analysis. The analysis framework consists of the following:

1. Identify a reoccurring problem, such as status;
2. Consider environmental conditions that may have led to the adaptive function;
3. Specify the design features of the information-processing mechanism (typically forms the hypothesis);
4. Describe how the adaptive function is performed;
5. Evaluate how the performed function, under the specified design, solves the problem identified in step 1.

In response to Gannon's (2002) argument, Saad (2008) describes the example of parental investment, where the parent with the higher level of investment, typically females, tends to be choosier when selecting a mate (Saad, 2008). Saad (2008) goes on to say if an anthropologist were to present findings of a culture where women generally exhibited a pattern of being less fastidious of partners it would falsify the existing theory of parental investment.

It is important to highlight here that gender roles are not accounted for in Saad's (2008) argument, it would be unrealistic to assume there are no cases of women being less choosey about their mating partners.

3.2.2 Common but differentiated: a response to gender essentialism in EP

Lastly, EP is often criticised for perpetuating gender essentialist ideas. Hagen (2005) indicates that the cognitive functions of the mind are considered equal, with slight variations occurring as each gender has been faced with different problems to adapt to. To emphasise this more clearly, Hagen (2005) compares the human body to the human mind. It is widely accepted that the human body and its functional organisation is the same across regions of the globe, with the exception of slight variations. The same is said for the biological male and female body, they have differences in reproductive organs and skeletal structure, but the rest of the body functions the same (Hagen, 2005). From the EP perspective the human mind functions similarly with slight variations occurring as a response to adaptive problems (Hagen, 2005). These variations could include differing physiological or hormonal responses to stress.

3.2.3 EP is an effective tool for consumer research

Patsiaouras and Fitchett (2009), as well as Saad (2008, 2009), highlight the historical rejection of evolution within marketing and how it can be a useful tool for examining consumer behaviour. EP differs from other social sciences in that it does not agree with the notion that humans are born as empty vessels, waiting to filled up with the social norms experienced around them (Siegert and Ward, 2002). EP, as described in the Handbook of Evolutionary Psychology suggests that humans are born pre-programmed with specific cognitive functions that allow social and cultural norms to be learned (Buss (ed.) 2005).

Despite the view that behaviour is an adaptive function, it is not considered optimally designed (Buss, 2007). Adaptive traits are projected to occur very slowly over time, suggesting that an evolutionary lag constrains optimal design of the mind (Buss, 2007; Griskevicius, et al., 2012). Evolutionary lag refers to the brain's inability to adapt as quickly as the environment, hence the engagement in somewhat counterintuitive behaviours, such as eating habits (Buss, 2007; Griskevicius, et al., 2012). The desire for rich, fatty foods exemplifies this. During the Pleistocene era, when humans were largely hunter-gatherers, food sources were often scarce. Fatty foods would provide a large source of calories and thus humans developed a taste for these foods. In the current, largely sedentary and food-abundant environment, humans no longer need to store large supplies of calories, however, they still have a taste for calorie rich foods (Buss, 2007).

3.3 Evolution, status and behaviour

Section 3.1.1 identifies several reoccurring problems the mind tries to resolve, from the EP perspective. Status, is one of those problems the mind seeks to resolve. The underlying motivation for acquiring status is attributed to a series of adaptive psychological mechanisms that evolved over time in response to reoccurring environmental and social problems that ultimately affected survival and reproduction (Buss and Kenrick, 1998; Saad, 2009). This section describes what status is, how it develops and cultural variations of status.

3.3.1 Status as a function of group living

Group living demonstrates a fundamental mode of survival and existence where individuals are discriminately social (Kyl-Heku and Buss, 1996; Kurzban and Neuberg, 2005). As early hunters were able to differentiate themselves with their hunting skills, social hierarchies emerged. A social hierarchy consists of a set of social norms that constrain the behaviour of individuals depending on their rank; different norms are associated with different levels of status (Kyl-Heku and Buss, 1996; Cummins, 2005; Bothner et al., 2012). Social motivations for status and group belonging strongly dictate individual behaviour, highlighting the underlying motivation between seeking higher status or simply maintaining current status to ensure group belonging. Those with the best skills for acquiring resources gained the most status. Social hierarchies allow for order through a clear distribution of resources among individuals of different rank, or status (Cummins, 2005; Cheng et al., 2013), where status is defined 'as priority of access to resources in competitive situations' (Cummins, 2005; p.677). Individuals of high status tend to have greater access to resources, which leads to higher rates of survival and reproductive success (Cummins, 2005; Cheng et al., 2013; Buss and Kenrick, 1998). However, Schradin and Lindholm (2011) provide a clearer distinction of status, arguing that it not only relates to an individual's resource wealth or fitness, but also to his or her ability to compete for higher levels of status.

Male hunters that typically sought out riskier hunts of large animals and shared the results with neighbours not only reaped the rewards of food stability, a valuable resource, but also experienced greater access to mates, produced more offspring and encountered higher instances of reciprocation, in other words status (Buss, 2007). The rewards linked to successful hunting not only incentivised high-risk taking, but also cooperation through sharing food.

3.3.2 Status and social comparison

Humans and other animals use social comparisons to estimate relative social rank, which when applied to evolutionary theory is linked to assertive and submissive behaviours (Gilbert et al., 1995). Gilbert et al. (1995) attributes this to an animal's resource holding potential (RHP). They describe RHP as, 'an intervening process which allows an estimate of fighting capacity and the probability of making a successful challenge or successfully defending against other challengers' (Gilbert et al., 1995, p. 152). When individuals are faced with a challenger an assessment of his or her self-concept is thought to dictate whether they will submit or assert to the challenger. If the individual determines he or she has a higher RHP than the challenger they will fight. In a fight, winning against an opponent is a socially desirable outcome and results in higher status. When applied to humans this may translate into behaviours that are not agonistic, given that aggression is looked upon less favourable in many modern cultures (Gilbert et al., 1995). As early humans made the transition to group living during the Pleistocene epoch, cooperation became much more imperative for survival (Sedikides and Skowronski, 1997). Cooperation, and thus altruism, is defined as any behaviour that improves the fitness of an individual while decreasing the fitness of the actor (Oda et al., 2011)

Early humans developed the cognitive ability to form complex social structures, which allowed for cooperation within a group setting (Sedikides and Skowronski, 1997; Buss, 2007). As group living emerged in conjunction with increased cognitive ability, individuals belonging to groups began to form an identity, or a notion of the self. This, combined with the development of social structures, led to the desire to differentiate oneself through status (Buss, 2007). Similar to RHP, when applied to humans the desire for relative status through non-aggressive means is referred to as *social attention holding potential* (SAHP) (Gilbert, et al., 1995; Buss, 2007). It is defined as the ability to attract positive attention, resulting in status without the use of aggression or threat.

3.3.3 Cost signalling theory

In the instance of consumption and status, it is the possession of high resource goods, which serve as a status symbol, especially within the dominant Western culture. Signalling status demonstrates one's ability to incur costs, such as time, effort or money, which are difficult for other's to replicate, as described by Cost Signalling Theory (Zahavi and Zahavi, 1997; Saad and Vongas, 2009; Griskevicius et al., 2010; Sundie et al., 2011). Demonstrating this ability to incur costs (Griskevicius et al., 2010, 2012; Saad and Vongas, 2009) compared to others grants greater access to mates, alliances and protection (Cummins, 2005; Buss and Kenrick, 1998). The benefits associated with rank relate to the perception that a person of high rank with high resources has the ability to provide and care for mates and kin, has the ability to ward off potential enemies, and has the ability to acquire resources necessary for survival when all others experience scarcity (Sundie et al., 2011).

Applying cost signalling theory to consumer behaviour provides additional insight into *why* the possession of high resource goods signals status among many cultures over many centuries. According to Penn (2003) these high resource displays attract mates and repel enemies. The visible display of wasting resources, such as spending large sums of money on consumer goods, sends an honest signal to others of ‘pecuniary strength’ as originally theorised by Veblen (Penn, 2003, p. 282). Based on the observations of Veblen, work by Penn (2003) and Griskevicius et al. (2012) attribute ever increasing levels of consumption to status signalling. The consumption of goods has become exaggerated in modern cultures whereby consumption is mimicked in a cycle of escalating contests to show wealth and power (Penn, 2003). Gilbert et al. (1995) suggests the underlying reason behind these contests stems from a desire to appear socially attractive.

The work of Veblen and those that came after him reveals that humans have an innate desire to signal status through the possession of high resource goods, however, cost is not limited to financial resources; it also corresponds to time and effort (Gilbert et al., 1995; Penn, 2003; Griskevicius et al., 2009). Further, work within EP has explored the notion of utilising pro-environmental behaviour as a form of status signalling (Griskevicius et al., 2010). Griskevicius et al. (2010) points out many earth friendly goods are more expensive then their counterparts and more often than not do not perform as well as the non-earth friendly version, one example being hybrid cars. Further, Griskevicius et al. (2010) demonstrates that study participants who chose the green product, despite the higher cost and lower performance, did so to enhance their self-image through overt altruism. Participants were willing to pay the higher price for these goods, not because they truly care about the environment, but it makes them look more appealing to other members in society (Griskevicius et al., 2010.)

Given the costs associated with PEB, the use of environmentally friendly products or the rejection of high-resource products indicates the actor has the time, money or effort available to engage in this form of pro-social behaviour, where the reward for such a sacrifice results in higher social status (Griskevicius et al., 2010; Cheng et al., 2013; Lee and Shrum, 2012).

3.3.4 Absolute status versus relative status

Status, especially absolute status is often bestowed upon a select few – those with high resources available to mitigate the costs of providing for a mate, ensuring the survival of many children and forming many coalitions (Gilbert et al., 1995; Penn, 2003; Marr and Insead, 2014). However, it has been suggested that relative status among peers motivates an individual's desire for status as opposed to absolute status, hence the common colloquialism, 'keeping up with the Joneses' (Griskevicius et al., 2012; Destin et al., 2012; Ordabayeva and Chandon, 2011). It is much easier to compare oneself to closer reference groups. For instance, we want the biggest house on the block, not just a big house (Griskevicius et al., 2012). When faced with the problem of status and thus seeking to solve the problem via relative status, an individual will then utilise environmental cues to develop a decision rule or strategy for solving the problem (Buss, 2007; Schradin and Lindholm, 2011). Classically, strategy is defined as a long-term plan to fulfil an overall aim, whereas a tactic is a short term plan to fulfil a specific goal. In regard to human and animal behaviour a strategy refers to decision rules for an individual's behaviour and a tactic is the resulting behaviour (Schradin and Lindholm, 2011). The literature on status often confuses the strategy with tactic, or even uses the two words interchangeably (Buss, 2007; Greengross and Miler, 2008; Cheng et al., 2013). It is possible that confusion regarding strategy and tactic could be attributed to differences in strategies for solving different evolutionary problems. For instance, strategies for retaining a mate differ from strategies for acquiring status, the latter being the focus of this thesis. It is important to highlight that given the importance of status, achieving and maintaining higher status allows for less effort to be placed on strategies for mate retention or coalition formation.

3.3.5 Culture and status

Status has meaning within a social group not just for the benefits it yields, but also the signal it sends about resource fitness; yet how status is signalled within a social group or society varies by culture. While evolutionary psychologists are often misconstrued as ignoring culture, proponents of evolutionary psychology see culture as a human universal, just as the ability to communicate through language is a human universal (Saad, 2012). The language may vary from region to region but the design of the mind allows for language to exist. Thus, to fully understand the universal desire for status it is necessary to consider status from a cultural perspective. In this section examples of status signalling will be explored from a cultural perspective. McCracken (1986) describes culture as the ‘lens’ through which the world is viewed and understood. McCracken’s view of culture and the meaning it applies to consumer goods builds upon cost signalling theory in that is allows for variance in status goods among different cultures.

An ethnographic study by Schouten and McAlexander (1995) encompasses the notion of status based on consumption among Harley Davidson owners in the United States. They identify this group as a subculture and define subculture as a distinct subgroup of society where group acceptance is based largely on the commitment to a common product (Schouten and McAlexander, 1995). Upon acceptance and integration into a local chapter of Harley Davidson motorcycle owners, the authors observe the effect of consumption on status within several Harley Davidson owner groups. Status was found to be linked not only to length of group membership and experience, but also knowledge of the motorcycles themselves. However, status is ultimately linked to the commitment to the consumption of everything that is Harley Davidson. Along with status within the group comes a stringent hierarchy, demonstrated through riding order among the group members, where members are expected to represent the Harley Davidson lifestyle in accordance with group norms and culture.

Consumption and thus commitment to the group is embodied not only in simply owning a Harley Davidson motorcycle, but also in the style of clothing worn, tattoos, pins linked to achievement and participation in group events. Commitment to the culture, and thus status, is largely linked to the visible consumption of all things Harley Davidson, where the expenditure of not just money, but also time and effort are reflected in a visible manner, similar to Veblen's observation of the leisure class. Thus one can utilise Consumer Culture Theory (Arnould and Thompson, 2005) to describe the context in which status is achieved through consumption, where the underlying motivation to acquire status in this manner is explained with evolutionary cost signalling theory. Consumer Culture Theory consists of several theoretical perspectives, which aim to explore and understand the relationship between the consumer, the marketplace and cultural meanings (Arnould and Thompson, 2005). Within the local groups of Harley Davidson owners, an individual may be of lower status within the group, but he or she may carry a different status among other groups. For instance, the authors of the study, Schouten and McAlexander, are well known within the field of academic marketing and could be considered high status academics among other marketing academics. Yet, within their ethnographic study, Schouten and McAlexander (1995) were of lower status and not readily accepted within the Harley Davidson community.

During their study Schouten and McAlexander (1995) had the opportunity to help a higher status member along the side of the road during a long ride. When a senior member of the Harley Davidson riding group had mechanical trouble, the authors pulled over to help the senior member and were thus visibly able to demonstrate their knowledge of Harley Davidsons. This incident provided the authors the opportunity to increase their status within the group. This example demonstrates the influence of culture on behaviour and consumption, where acceptance and status go beyond simply consuming Harley Davidson products. There are rites of passage, rituals and norms which must be obeyed in order to achieve status within the group. However, examining consumption and behaviour from the perspective of Consumer Culture

Theory fails to fully engender the underlying motivation to consumption of goods, such as Harley Davidson products.

Examining consumption using Consumer Culture Theory allows for the identification of what goods status signals from one society to another. For instance, the Harley Davidson products in Schouten and McAlexander's (1995) study, or appliances and packaged foods for the rising middle class in Chaudhuri and Majumday's (2006) research. Comparatively, from the EP perspective, Griskevicius et al. (2007; 2012) and Buss (2007) also identify status-signalling goods in different societies. However, these authors also identify conspicuous altruism as status signalling behaviour. One example is the practice of potlatching within the Kwakiutl tribe of North America. Local chiefs compete to give away or destroy their possessions during potlatching in order to obtain prestige and high status (Buss, 2007; Griskevicius et al., 2007; 2012). Similarly, in India, prior to independence in 1947, material wealth was often underplayed (Chaudhuri and Majumday, 2006). Before the influence of Western culture led to conspicuous consumption of household goods wealthy individuals in India would donate to charity in order to acquire and maintain a prestigious status (Chaudhuri and Majumday, 2006). These examples of conspicuous altruism demonstrate that acts of pro-sociality, or altruism, can be an effective method of acquiring status and signalling, as opposed to increasing, levels of consumption.

The examples described above provide culturally distinct examples of how status is displayed. Culture acts as the lens through which we can delineate the meaning of behaviours; yet it also influences behaviours (McCracken, 1986; Derksen, 2010). Culture allows for an understanding of proximal meanings of behaviours, where, for example, in the subculture of Harley-Davidson owners jeans, boots and a leather jacket symbolises high status (Schouten and McAlexander, 1995), while in Turkish culture, veils made in eye-catching colours and fine fabrics signal emergence into the middle class (Sandikci and Ger, 2010). Evolutionary psychology establishes a deeper understanding of the need and motivation for status, whereas Consumer Culture Theory identifies how that status is signalled within a particular culture or subculture. Seeking to change consumption in a way that may benefit the environment requires a systemic change to consumer culture and thus a deeper understanding of the relationship between status and consumption both at the ultimate and proximal levels (Spaargaren, 2011; Griskevicius et al., 2012).

3.4 Bourdieusian status

Research on status consumption has been underpinned by theories established by Veblen (1899) and fortified in the last century by Bourdieu (1984). Bourdieu's concept of status, which has been used significantly within consumer research, focuses on social construction of status as a function of the dominant social classes (Coskuner-Bali and Thompson, 2013). It is from this perspective that status is a direct result not only of an individual's socioeconomic status, but also their upbringing, education, and peer groups (Holt, 1998). Thus status is not just a distinction of economic capital but cultural capital as well. Bourdieu defines cultural capital as a culmination of social influences that result in a distinct preference for certain consumption practices. For instance, Bourdieu states, 'nothing affirms one's 'class', nothing more infallibly classifies, than tastes in music' (Bourdieu, 1984, p. 18). He explains this by citing the act of concert going or playing a musical instrument as practices which are unique to the upper classes. Where practices such as going to the theatre or a museum are more widespread. Therefore, preferences for types of music are based on socioeconomic status and all the social influences associated with that status. It is from Bourdieu's perspective that an individual cannot escape his or her social class, even if he or she learns all of the practices and rituals of the class they aspire to be a part of (Coskuner-Bali and Thompson, 2013). Although Bourdieu acknowledges the use of different strategies for social status, he argues they vary by social class or economic class, a concept central to the consumption practice of demonstrating status (Üstüner and Holt, 2010).

Bourdieu (1984) postulates that status consumption, or demonstration of status consists of three constructs: habitus, cultural capital and social field. In his theoretical model, cultural capital exists through implicit knowledge developed within an individual's upbringing, the possession of material objects and institutional validations such as university degrees. It is through this cultural capital that habitus is formed. Habitus, according to Bourdieu (1984) refers to the social structures among the classes which impacts the thinking, feelings and attitudes towards social situations. These thoughts and attitudes vary according to the social field. The social field refers to distinct, structured arenas where individuals compete for status within a social hierarchy. Examples of these fields include education, politics, religion, business or the arts (Holt, 1998). According to Bourdieu's theories on status and cultural capital, an individual can acquire status in each social field by excelling in that field. For instance, in academia, an academic could compete for status by demonstrating skills as a researcher, presenter and lecturer. Consumption, according to Bourdieu, reinforces cultural capital and social structures unique to a distinct group such as the elite, as opposed to building and maintaining a unique identity.

Thorton (1996) goes further by examining the notion of subcultural capital. She proposed that status and status consumption was not limited to the dominant social classes. Instead, she asserted that social groups that do not fit within the dominant socioeconomic classes form their own systems of status (Coskuner-Bali and Thompson, 2013). These groups develop their own hierarchies and status goods, which do not emulate the consumption practices of the social elite. In a sense, they manage to escape the marketplace by developing their own status symbols through consumption (Kozinets, 2002; Coskuner-Bali and Thompson, 2013). The work of Thornton on club culture (1996) and Kozinets on Burning Man (2002) suggests that subcultures of consumption or anti-consumption allow consumers to break free from the constraints of the dominant social classes and their influence on consumption. However the point is not that these cultures of consumption differ on what they consume, but *how* and *why* they consume may be construed as universal.

3.4.1 Moving away from Bourdieu

This thesis is distinct from Bourdieu's notions of status in that it approaches social status as a means of demonstrating resources for fulfilling adaptive mechanisms. This thesis further assumes that status-seeking behaviour is not the result of a conscious strategy to elevate oneself to the upper class of society. Bourdieu's theory on status has been adapted within the literature to explain status consumption strategies across cultures, where strategies vary by context (Üstüner and Holt, 2010); this thesis is concerned with the causal mechanism of status strategies that underpin consumption decisions, where the two available strategies are universal to all social animals. The theory used in this work is based on Darwinian theory of survival and reproduction and is thus a direct contradiction to Bourdieu's ideas of classism and reproduction through consumption. Holt (1998) criticises existing theory for failing to explain why consumption of goods in relation to status differs across cultures in the type of goods that signal status.

The evolutionary psychology perspective on consumer behaviour explains that items that symbolise status are ones that are difficult for others to replicate, as explained through the cost signalling theory. Holt (1998) suggests Bourdieu's theory on social class, 'downplays public displays of status symbols through consumption; status is continually reproduced as an unintended consequence of social interaction' (Holt, 1998, pp. 4). And so, where Bourdieu falls short is explaining why these social interactions lead to constant hierarchy negotiation and if not through public display, how do individuals negotiate these hierarchies; the conceptual framework introduced here establishes the foundation for explaining this.

3.5 Summary of status, strategies and tactics

This chapter described the foundation of evolutionary psychology, which is the conceptual framework for this thesis. It further described the main criticisms of the discipline as well as the benefits it has in application to consumer research. The chapter established the core theory on status, cost signalling theory and social attention holding potential, where status is established as a reoccurring problem the mind seeks to resolve. This is due to the many benefits an individual receives when he or she has high status within a social hierarchy. The chapter also discussed how the problem of status emerged through group living as well as other perspectives on status. These perspectives focused on Consumer Culture Theory and Bourdieu because they have given a great deal of consideration to status. The next chapter examines how status is achieved and the presents a model for predicting status driven behaviours.

Chapter 4: How status is achieved

The aims of this chapter are:

- To present the current knowledge on strategies for status.
- To examine the tactics for hierarchy negotiation
- To propose the theoretical contributions of the paths for achieving status this research will seek to resolve.

The previous chapter discussed the notion of status and cost signalling theory with a conceptual framework of Evolutionary Psychology (EP). It further described cultural and sociological approaches to status through Consumer Culture Theory and Bourdieu. This chapter explores how status is achieved, looking more closely at two strategies for status, Dominance and Prestige identified by the literature. These two strategies identified within the literature help close the gap in knowledge on the paths for achieving status, however there is still a lack in understanding how individuals choose one strategy over another. This chapter begins with a general construction of the current understanding of Dominance and Prestige and then provides a general model of what the path to higher status might look like, based on extant literature. The chapter then incorporates more factors from a wider review of the literature to create a more detailed proposed theoretical model of how the path to higher status could look like. This includes a closer examination of competitive constructs, as well as a discussion on tactics used for increasing status as dictated by social. In order to build a more complete theory on the path towards status, this chapter includes four propositions in which the results of this research aim to support.

4.1 Defining status strategy

Over time, the human brain has developed the cognitive ability to solve the problem of acquiring status by learning effective strategies and corresponding tactics, as discussed in section 3.3. Strategy is defined as a long-term behavioural rule for accomplishing goals (Schradin and Lindholm, 2011). The resulting behaviour of these decision rules is defined as tactics. What remains unclear within the literature is a full understanding of the relationship between status strategies, competitive constructs and tactics. Evidence does indicate that both individual differences and environmental factors influence strategy decisions, while group norms may influence the specific tactic used (Kyl-Heku and Buss, 1996; Hardy and Van Vugt, 2007; Derksen, 2010; Rosati and Hare, 2011; White et al., 2012). In developing a greater understanding in the path or route to higher status this thesis focuses on the two strategies identified within the literature. The remainder of this chapter outlines the proposed path to higher status via either strategy with consideration for environmental stimuli and individual differences. Additionally, the literature is unclear on where the distinction is between strategies or processes for acquiring for status and actual Dominance or Prestige once status is acquired.

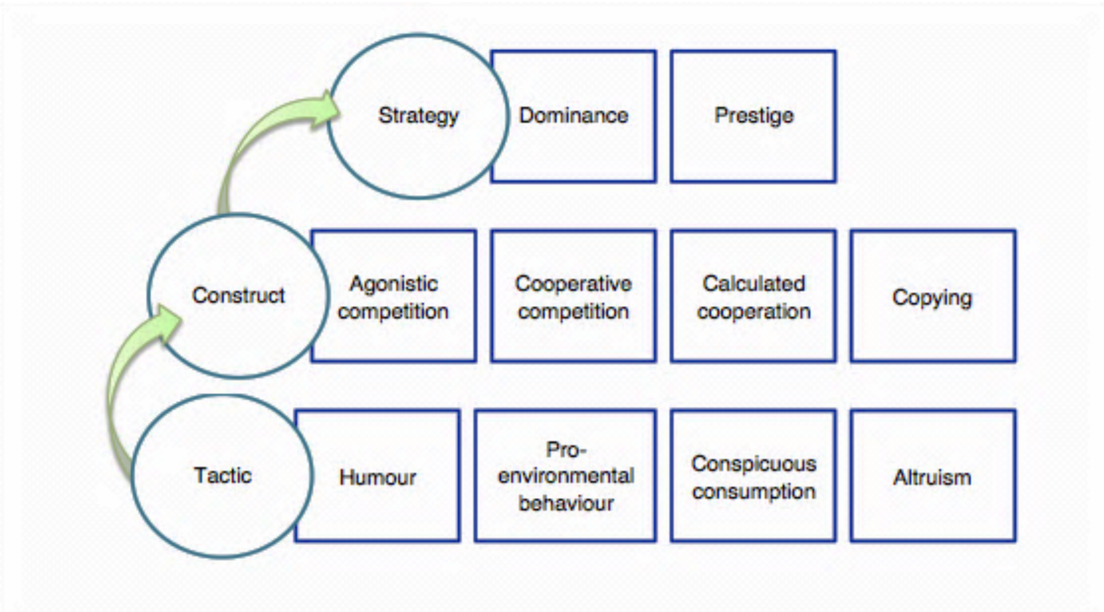

Figure 4.1: Basic proposed relationship between strategy, competitive construct and tactics.

A review of the literature indicates that there is a relationship between status strategies, tactics and competition, however there is no existing model to describe this relationship. This may be a result of the lack of universal distinction between strategy and tactic within the literature. For instance, Greengross and Miller (2008) describe the use of humour as a strategy for achieving status, yet they further indicate that humour may be used in two distinct ways, positively and negatively. This suggests that humour may be used in two distinct ways under a larger decision-rule, such as a strategy and therefore should be considered a tactic.

Figure 4.1 outlines the components identified from the literature and proposes a very general potential relationship within the context of this research. The remainder of the chapter will examine these components in order to build up to a more detailed model. As it currently stands, Figure 4.1 indicates that an individual may apply a competitive construct to one or a variety of tactics, under a larger behavioural decision rule, or strategy to increase status. The exact path between the levels of achieving status is unclear. The remainder of the chapter will draw information from the literature to propose a clearer understanding of the relationship between tactics, competition and strategy for status, thus expanding the model. This will start with a more in-depth examination of the literature on the process of using Prestige or Dominance in order to achieve higher social status.

4.1.1 Two strategies for status

The process of achieving status among a peer group underpins the issue with status acquisition. For instance, Henrich and Gil-White (2001) suggest the process of achieving status may differ from the resulting status. They state that an individual may use one of two strategies identified in the literature, Dominance or Prestige. This has been further supported through the work of Cheng et al. (2010; 2013). Expanding on the notion of developing a strategy for status has been suggested that individual differences such as physiology (Cummins, 2005; Gruenewald et al., 2006) may influence the decision to use one strategy over the other.

According to Henrich and Gil-White (2001) an individual may use a Dominance strategy for achieving higher status but the end result could be perceived as Prestige status. These two strategies, although distinct in their characteristics are perceived to have similar influence and effect, and are thus be viewed as two distinct types of status (Halevy et al., 2012; Cheng et al., 2013). An individual exhibiting a Dominant status strategy typically demonstrates assertive, competitive, coercive and aggressive behaviours (Henrich and Gil-White, 2001; Halevy et al., 2012; Cheng et al., 2013). A Prestige driven individual most often demonstrates behaviours that exhibit competence, knowledge, hard work and altruism (Henrich and Gil-White, 2001; Halevy et al., 2012; Cheng et al., 2013). An individual exhibiting a Prestigious status is typically more well liked, respected and copied, increasing their chances of forming coalitions and attracting and retaining mates, or solving the domain-specific problems identified in evolutionary psychology (Halevy et al., 2012; Cheng et al., 2013; Griskevicius et al., 2012). Conversely, Dominant individuals are often described as individuals that are feared and avoided by others within a peer group (Hawley, 1999; Henrich and Gil-White, 2001; Halevy et al., 2012). Thus based on the literature it is proposed:

Proposition 1. Dominance and Prestige are the two distinct and separate strategies for achieving status.

Despite the understanding of the differences between these two strategies there needs to be further clarification between Dominance and Prestige and how they differ as a process for acquiring status in order to develop a complete theory on status (Buss, 2007). The process of acquiring status typically requires some form of competition, however the literature does not clearly link different forms of competition with either strategy for status. For example, as stated earlier in this section, the literature attributes competition to Dominance, yet Cheng et al. (2013) suggest individuals can compete via Prestige.

4.1.2 Duality of competition

According to Hawley (2011) competition is either expressed directly or indirectly. The direct measures, according to Hawley (2011, p. 8), bypass the goals of the social group in order to fulfil individual goals in an aggressive or assertive manner. Conversely, indirect forms of competition reflect goal achievement through cooperation or reciprocity (Hawley, 2011, p.8). These indirect methods may relate to Dominance in that individuals may take advantage of the group's pro-sociality to achieve their own goals through calculated cooperation (also referred to in the literature as manipulative social behaviour or Machiavellianism[1] (Wilson et al., 1996)), thereby removing any sense of altruism from the motivation behind this type of behaviour. Given the two forms of competition, indirect and direct, it is apparent

[1] Wilson et al. (1996) defines manipulative social behaviour as a strategy for personal gain, whereas Cheng et al (2013) characterise manipulative social behaviour as a characteristic of a Dominance strategy for status, thus in this thesis it is defined as a competitive construct.

there are four main underlying constructs through which one may apply to status strategies.

From the literature, these four constructs are identified here as follows: agonistic competition, which aligns itself with the more traditional definition of Dominance, aggression and assertiveness (Hawley, 2011); cooperative competition, a form of competition that utilises altruistically motivated tactics and adheres to the definition of social dominance (Henrich and Gil-White 2001; Cummins, 2005; Hardy and Van Vugt, 2006); calculated competition, where an actor will utilise tactics that appear to be altruistic or cooperative, but are dishonest (Trivers, 1971; Wilson, 1996); and lastly, copying, in which people copy the behaviour of a high-status model (Henrich and Gil-White, 2001). Among these constructs there are a variety of tactics available to use and each may be used under either strategy for status. Tactics may include humour (Greengross and Miller, 2008), conspicuous consumption (Griskevicius et al., 2010; Sundie et al., 2011) or pro-environmental behaviours (Griskevicius et al., 2010; Zabkar and Hosta, 2013). Each tactic is discussed in greater detail in Section 4.4.

Altruism and pro-social behaviours are posited to be motivated by self-interest (Eldakar and Wilson, 2008; Griskevicius et al., 2010), and therefore it is difficult to distinguish between competitive cooperation and calculated cooperation. It is suggested here that the difference between the two competitive constructs lies with the behavioural decision rule. Individuals that consciously seek to achieve their own goals by taking advantage of the group's pro-sociality would do so under calculated cooperation. Meanwhile, those that compete via cooperation maintain the group goals and engage in competition subconsciously. Thus, it is proposed here that a Dominance strategy for status is most likely to occur via agonistic competition or calculated cooperation, where agonistic competition is a direct form and calculated cooperation is indirect. Applying Hawley's (2011) characterisation of competition to the proposed constructs under Prestige, competitive cooperation is a direct form of competition and copying is indirect.

4.1.3 Competition via a Prestige strategy

The process of acquiring status through Prestige is linked not only to the demonstration of skills such as talent and intelligence, but also cooperation. Prestige may be considered the default strategy for status, as people are more likely to copy as opposed to compete because it is easier and less costly in terms of mental and physical effort (Griskevicius et al., 2012; Cheng, et al., 2013). However, considering the evidence of demonstrations of altruism in a competitive manner would indicate that it is possible for people to compete via cooperation under a Prestige strategy. Therefore, it is proposed here that individuals may use one of two competitive constructs under the Prestige strategy for status, competitive cooperation and copying.

Competitive altruism, or cooperation, is defined by Hardy and Van Vugt (2006, p. 1402) as altruistic behaviour in which individuals engage in, ‘for reputation reasons because selective benefits (associated with status) accrue to the generous.’ Roberts (1998) suggests partners in economic games compete with each via escalating forms of cooperation as a result of the increase in status or reputation. Roberts (1998) goes on to explain this using the example of the game the Prisoners Dilemma. Systematically, players in the game are often better off exploiting their partner. However, when reputation or status is at stake, increasing levels of cooperation result in a greater payoff. Thus it could be observed that individuals playing the Prisoners Dilemma will compete via cooperation to gain the attention of other altruists or potential mates. Böhm and Regner (2013) support Roberts’ (1998) theory by showing that when given the opportunity to increase social status, individuals will compete via escalating forms of charitable behaviour. They found that when relative status was shared, showing how charitable each study participant was during a real-effort task of ‘click-for-charity’, charitable behaviour of study participants increased.

The notion of competing with peers via altruistic behaviours stems from cost signalling theory (Section 3.2.3). Altruistic or cooperative behaviours are costly to the actor and send what Hardy and Van Vugt (2006) and Griskevicius et al. (2009) refer to as an ‘honest’ signal to others about the actor’s resources. These signals are considered ‘honest’ in that they demonstrate the individual has the time, money, effort, intelligence, or health to engage in costly behaviours as a benefit to others, which cannot be faked.

Copying, another competitive construct proposed to occur under a Prestige strategy for status is a low risk method for acquiring status within a peer group, especially when entering a new group. In terms of learning new behaviours through trial and error, without a knowledgeable model to mimic, it requires much greater effort than copying the successful behaviour of another individual (Griskevicius et al., 2012). It is due to the mental energy saving efficiency of copying that it is considered a favoured adapted trait, selected for through the pressure of evolution (Henrich and Gil-White, 2001; Griskevicius et al., 2012). Evolution favoured the selection of specific traits; one of those traits is the instinct to subconsciously copy others (Griskevicius et al., 2012). Copying proved to be a successful adaptive trait for survival during the EEA, when individuals of high status possessed the skills necessary for successful survival and reproduction. Individuals of lower status choose successful models to copy in order to ensure their survival. The environment allowed for others to learn and copy these skills to ensure their survival, thus, the trait of copying became one that was repeatedly selected for in mating (Henrich and Gil-White, 2001; Buss, 2007; Griskevicius et al., 2012). The adaptive trait to subconsciously copy others helps to explain why normative messaging has such a strong influence on behaviour. Normative messages may be framed in a way that signals to a wide audience the behaviour of successful leaders or models that should be copied. As in the case with the study conducted by Schultz et al. (2007), described in Chapter 3, when individual households learned how their energy consumption compared to their neighbours' average consumption, they altered their consumption to match the average..

Thus, based on the literature reviewed in this section it is proposed:

Proposition 2a. Based on the reported characteristics of Prestige, cooperative competition and copying, it is proposed under a Prestige strategy for status cooperative competition is a direct competitive construct and copying is an indirect competitive construct.

4.1.4 Competition via a Dominance strategy

The second process for status achievement is Dominance. It is conventionally viewed as a method that is associated with characteristics of fear, aggression, manipulation and coercion (Cheng et al., 2013), much like the perception of characteristics commonly associated with competition (Russell and Fiske, 2008). When engaging in competition, the ultimate goal is to out-perform rivals and thus encourage deference from others (Henrich and Gil-White, 2001; Duffy and Kornienko, 2010). The literature suggests that humans all have innate competitive motives, however, as competitive individuals are often perceived as cold and unreliable, this contradicts the notion of competitive altruism that people can compete via Prestige. Dominance is viewed not only as the motivation to compete, but the ability to do so (Hawley, 1999; Cummins, 2005). This includes the perceived ability to compete, along with the corresponding resources, knowledge and skills to compete and win a higher status within a social group. This view on perceived ability and resources, along with the indication above of heritable traits related to competition, indicates that there are certain naturally occurring conditions under which an individual may choose to compete for status, as opposed to copy high-status behaviours. In Section 4.1.1 it was suggested that under a Dominance strategy for status an individual would compete either agonistically or engage in calculated cooperation, or Machiavellianism.

Calculated cooperation is linked to the motivation to engage in cooperative behaviours and is considered to be a form of manipulative social behaviour (Trivers, 1971). Typically people that engage in this type of cooperation, 'pretend increased cooperation when threatened with punishment,' such as a loss in status (Wischniewski et al., 2009). Wilson et al. (1996) suggest this type of manipulative behaviour is capable by all humans to some degree. They further argue that this type of behaviour cannot be identified by a single trait, that it is comprised of a variety of complex traits, much like the decision to compete directly or indirectly, and the decision to choose one status strategy over another. To engage in this type of behaviour an individual must be able to monitor the behaviour of peer group members, change their own behaviour in social situations and do it in an inconspicuous manner, thus requiring a high level of social intelligence (Sedikides and Skowronski, 1997). Furthermore, this type of behaviour is often difficult for peers to identify (Trivers, 1971; Wilson et al., 1996; Sedikides and Skowronski, 1997). What links this type of behaviour to a Dominance strategy is the use of deception and manipulation, traits typically associated with Dominance (Hawley, 1999; Cheng et al., 2013).

The direct form of Dominance often results in agonistic competition, or competition that is aggressive or forceful (Henrich and Gil-White, 2001). This type of process for acquiring status is noted for being predominant among nonhuman animals, whereas it is a less successful form of competition among humans (Hawley, 1999; Henrich and Gil-White, 2001). Within social hierarchies, agonistic individuals are avoided and receive less attention than their peers who choose to use more cooperative forms of interaction. Agonistic forms of competition tend to occur as highly visible contests, where the outcome may be predicted by the size, sex or aggression of the combatants (Hawley, 2011). These types of contests often lead to asymmetrical hierarchies, where subordinates willingly defer to agonistic dominant individuals as a function of survival and social comparison (Gilbert et al., 1995).

With the less desirable characteristics associated with Dominance and the default preference to select for Prestige, one might question the continued presence of Dominance as a means for achieving status. Recall, from the evolutionary perspective selection, occurs not only to seek out favourable traits, but also differentiation (Buss, 2007; Derksen, 2010). Based on changes in the environment, certain traits may be more favourable than others and, therefore, selection for these traits may fluctuate over time. For instance, Nettle (2006) uses the Trinidadian Guppy to describe of how certain traits in psychology/personality are heritable in non-human populations, and some of these traits are bred in and out relatively quickly based on changing environmental stimuli. In the event that population of predators of the Trinidadian Guppy decreased, bolder behaving guppies were found to be selected for more often, as they were able to acquire larger quantities of food. However, when the population in predators increased the guppies with a more cautious temperament will be selected for (Nettle, 2006). The same is true for the selection of more competitive or Dominant individuals in the human population. In times of scarcity it, agonistic competition or calculated cooperation leads to greater success (Wilson et al., 1996). Thus, individuals exhibiting Dominance strategies would be have been selected, as they most likely would have had greater skills in acquiring food and survival.

Thus, based on the literature reviewed in this section it is proposed:

Proposition 2b. Based on the reported characteristics of Dominance, agonistic competition and calculated cooperation, it is proposed under a Dominance strategy for status agonistic competition is a direct competitive construct and calculated cooperation is an indirect competitive construct.

4.1.5 Reconciling Dominance and Prestige

Despite the distinctions in the literature between the characteristics of displaying Dominance and Prestige, Cheng et al. (2010) suggests that individuals have the ability to compete for higher status under Prestige, even though competition has been linked to Dominance (Russell and Fiske, 2008). However, when one starts to consider the process by which an individual acquires status, such as via direct or indirect competition, it is difficult to reconcile the notion that an individual can compete via a Prestige strategy for status given that competition is often linked to Dominance. The literature exhibits a clear gap in understanding this relationship between the process of status acquisition and either strategy for status. The literature suggests humans have an inherent motive to compete for status, given that high status is rewarded with high resources and resources are limited (Cummins, 2005; Russell and Fiske, 2008; Duffy and Kornienko, 2010). As resources are distributed among individuals of differing rank, competition for higher status drives behavioural decisions (Rosati and Hare, 2012; Cummins, 2005; Griskevicius et al., 2012).

Buunk and Massar (2012) state that competitors are often perceived as rivals, as they compete for resources. Individuals that resort to coercion, aggression or fighting via direct competition risk a loss in reputation or even death, whereas individuals that rely on more submissive tactics such as indirect competition, live to fight another day (Buss, 2007). As individuals of lower rank are faced with the problem of access to resources and ultimately survival, they must decide to compete or cooperate (Russell and Fiske, 2008; Buss, 2007). The evidence provided by Henrich and Gil-White (2001) and Russell and Fiske (2008) would lead one to conclude that a person utilising a Prestige strategy for status cannot do so via the method of competition, based largely on how Prestige and competition are defined.

The ability to choose between Dominance and Prestige is thought to be due to a cognitive ability to observe certain social cues and develop a strategy for navigating the social dominance hierarchy found among social groups (Cummins, 2005). This explanation is referred to as Social dominance theory. Social dominance theory rests on two main principles. The first is that 'domain-specific strategies for reasoning about social norms involving dominance hierarchies' have evolved within the human mind (Buss, 2007, p. 366). The second principle is that these strategies are distinct from other types of reasoning strategies, such as mating strategies (Buss, 2007). Thus, humans have the ability to discern between two strategies for achieving higher social status and further decide on an appropriate tactic for achieving the goal of status, where any tactic may be utilised under either strategy for status. This ability or mechanism of the mind that allows an individual to navigate social situations developed to solve the problem of dominance hierarchies, therefore, allowing a differentiation between the process of acquiring status and the benefits associated with it (Cummins, 2005; Buss, 2007). Although this theory describes *why* humans are able to discern between two strategies for status, it does not fully describe *how*. The following section reviews the literature on factors thought to influence the decision making process for increasing status within a peer group.

4.2 Factors that influence status strategies

Dominance and Prestige not only refer to a type of status, but also the process by which an individual acquires status within a social hierarchy. This research concentrates on the process of acquiring status through one of the two strategies identified, Dominance or Prestige. The literature distinguishes each strategy by a distinct set of characteristics as identified by Henrich and Gil-White, 2001; Cheng et al., 2013; Hardy and Van Vugt, 2006. Cheng et al (2010; 2013) have explored methods for predicting which strategy an individual will choose and suggest personality is a good indicator for predicting Dominance or Prestige strategies in individuals. Meanwhile, Cummins (2005) and Guenewald et al. (2006) suggest physiology has a significant role in the desire to seek higher status within a peer group. Lastly, work on environmental or social cues by Frey and Meier (2004), Hardy and Van Vugt (2006) and Griskevicius et al. (2010) suggest self-assessment comparisons to peers influence status strategies. This section will examine these factors more closely to incorporate greater detail in the proposed theoretical model on the path for higher status.

4.2.2 Physiology

From the literature, physiology has been linked to status strategies and competition for status. It is suggested that certain physiological traits may inhibit an individual's ability or perceived ability to increase his or her status within a social group. Furthermore, Bandura (1982) asserts physiology has a role in self-efficacy judgements. Stress levels serve as a cognitive cue, which informs the actor of their potential success of engaging in certain behaviour. When stress levels are high, self-efficacy assessments tend to be low, as are perceived capability to successfully complete a task, such as seeking higher status (Bandura, 1982). Cummins (2005) describes the physiological reaction to a loss in status or consistently perceived low status, where an individual will experience increased levels of cortisol, a hormone activated by stress. This physiological reaction largely affects a person's mood and motivation (Cummins, 2005; Gruenewald et al., 2006). Marr and Insead (2014) look at this more closely in the realm of the American sport baseball, where high status players demonstrate a chronic decrease in performance when they experience a loss in status. The loss in status these players experience ultimately effects their future performance and alters their perceived ability to compete, which may be the result of a prolonged increase in cortisol levels. Further support is demonstrated in a study of subjective social status (SSS) among high school students of various ethnic backgrounds and socioeconomic statuses (Destin et al., 2012).

Destin et al. (2012) found students that perceived themselves to be of higher status among their peers within the high school tended to suffer less emotional distress and achieve higher grades (Destin et al., 2012). Destin et al. (2012) fail to explain the underlying causes of this. However, there is evidence of physiological responses to perceived social status, which impede motivation and effect long-term behaviour. This includes increased levels of cortisol activated by stress experienced through loss in status and increases in adrenalin when status is challenged (Cummins, 2005; Gruenewald et al., 2006). Conversely an individual experiences an increase in serotonin when experiencing a lift in status, along with androgen (Cummins, 2005; Gruenewald et al., 2006). These physiological changes lead to changes in mood, perceived ability and motivation to undertake certain actions. Measuring individual cortisol levels before, during and after hierarchy negotiation could be a strong predictor in an individual's decision to engage in either strategy for status. For instance, an individual that has experienced a chronic perceived lower status may be more motivated to take active measures to increase their social status, provided they have the cognitive ability to discern which measures would be most effective in specific social situations (Hawley, 1999; Cummins, 2005). However, Gilbert et al. (1995) states changes in physiology are a consequence of changes in rank, not the cause, therefore physiology is not included in the model at this time.

4.2.3 Social cues

Although physiology and personality could be useful predictors in status strategy decisions and thus consumer behaviour decision, exploring these two factors alone would not allow for social influences. From the EP perspective humans are social animals and discriminately so. The discussion on normative influences in section 2.9 reveals that understanding the path to status requires an understanding of the influence of social cues. The notion that social cues influence the decision to adopt a certain tactic under a strategy indicates that the decision to adopt a Dominance or Prestige strategy may be influenced by certain environmental stimuli. EP asserts that behaviour is largely a function of an evolved adaptive mechanism of the brain along with environmental inputs (Derksen, 2010). This research seeks to identify those mechanisms and environmental inputs as a means to predict which strategy for status an individual may choose. The following section will recall the characteristics of each strategy for status, along with propositions for examining them in greater detail. Following that the proposed model outlining the process of status achievement will be described.

4.3 Building a more complete theory on status

This section incorporates more detail into the basic model from Figure 4.1. It describes a holistic model, which identifies the factors identified in Section 4.2 to predict how and when an individual will try to acquire status. The proposed detailed model moves beyond value-based models such as the Theory of Planned Behaviour described in Chapter 2, to build a more complete model of behavioural intentions when seeking status. This section builds the model piece by piece to describe how it may contribute to a more complete theory of when and how people use either strategy for status and how that may be applied to encouraging pro-environmental behaviours.

The model proposed by this thesis endeavours to provide a theoretical understanding why behaviour manifests itself as it does in today's world, where behaviour is the ultimate result of a mind that is a product of natural selection (Saad and Gill, 2000; Buss, 2007). In the instance of promoting sustainable consumption, where increasing levels of consumption have been strongly linked to status, the evolutionary theory of cost signalling helps to explain why high-resource displays of skills, time and effort have signalled status among many cultures over many centuries. The beginning of Chapter 2 discussed the work of Veblen, where it was his view that individuals engage in increasing levels of consumption as a result of an inherent desire to emulate others and demonstrate status (Wisman, 2011). The ability to signal status through consumption is thought to ultimately alter behaviour as individuals constantly attempt to emulate the consumption habits of higher status individuals (Wisman, 2011). It is this social behaviour that has led to overconsumption and the present climate issues, where consumer value is a direct result of status signalling (Griskevicius et al., 2012). It has been argued that applying status motives to pro-environmental behaviours could be a useful method for changing consumption, thereby decreasing the negative impact humans have on the natural environment (Penn, 2003; Griskevicius et al, 2010 and 2012; Zabkar and Hosta, 2013)

Status or rank within a social group is determined rather quickly, especially when circumstances change – such as with new group formation or group transitions (Lund et al., 2007; Buss, 2007). A desire for status often occurs on a subconscious level, therefore, the goal may be more oblique than a higher position within in a group, although within the literature the two most prevalent life goals are achievement and upward striving, or in other words, ‘get ahead’ or ’get along’ (Kyl-Heku and Buss, 1996). Due to the benefits associated with high status, evolutionary psychology theory on status and personality argues that humans have an underlying motive or natural tendency to strive for high status (Lund et al., 2007; Marr and Insead, 2014; Buss, 2007). However, as stated in Section 1.2 of this thesis, according to Buss (2007) there is no complete theory on the paths or routes to higher social status. In an effort to contribute to this lack in theoretical understanding, a more holistic model is proposed. One that considers both individual differences such as self-efficacy, personality and perceived status, as well as environmental cues such as visibility.

Proposition 3. Individual differences, such as perceived self-efficacy, and social cues influence the use of one strategy over another.

The model is described in the following subsections and broken down into three figures to highlight the three phases of the model, with the core features of the model shown in Figure 4.4. The sections describe how the path for high status might be achieved upon entry into a new peer group.

4.3.1 Initial encounter with the problem of status

Upon entry into a new social group an individual is confronted with the problem of status (Lund et al., 2007). When confronted with the problem of social status the individual must first decide if he or she identifies with the group (Tajfel and Turner, 1979). If the individual decides they do not identify with the group, then status is not an issue and the person does not engage in status-seeking behaviour. In the instance that the individual decides he or she does identify with the group, they quickly assess their perceived position, rank or status within the group (Buss, 2007). If the individual perceives him- or herself to be of high status, then he or she may be content to continue with their current behaviour to maintain that status. The same may be said for an individual of low status. Some individuals are happy to maintain a low status and will not engage in any behaviour to alter their current status, this is due to the high costs associated with competition (Frank, 1985). If a low status individual should attempt to compete for higher status and lose, he or she may be worse off than before, either by experiencing an even lower status or exile from the group.

Figure 4.2: Proposed process for status-seeking decision rule.

The same may be said for an individual of low status. Some individuals are happy to maintain a low status and will not engage in any behaviour to alter their current status, especially if the low status individual does not identify an opportunity to change it (See figure 4.3).

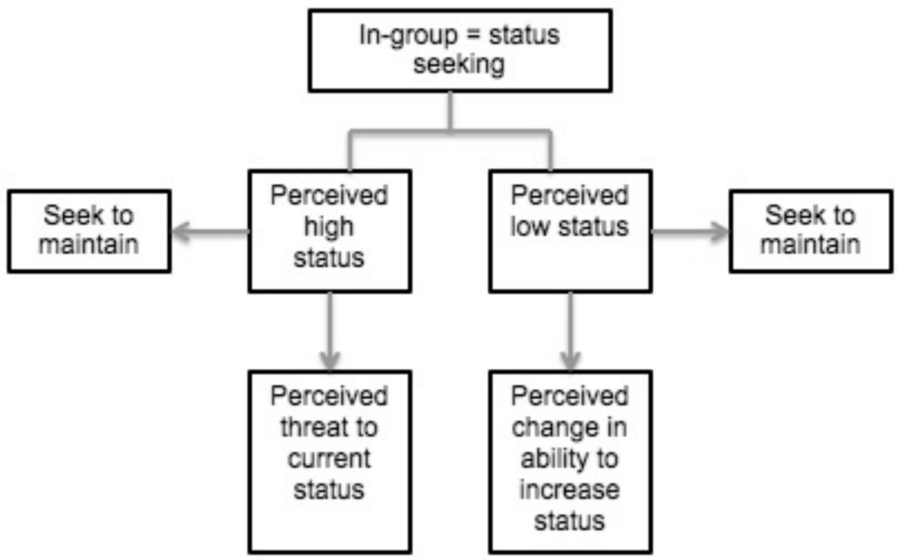

Figure 4.3: Proposed decision-making process for changing status.

A high-status individual, however, may perceive a threat or risk to their status and will have to decide what course of action to take in this instance. Again, the individual may decide to simply maintain his or her current status, or may decide to adopt a strategy to overcome the threat to his or her current status. The choice would be between either Dominance or Prestige In *Primates of Park Avenue,* Martin (2015) describes the story of one chimpanzee among the Gombe troop studied by Jane Goodall, named Mike. Mike was a newcomer to the group and was repeatedly ostracised, beaten up and tormented. This continued until one day Mike found a couple of empty kerosene canisters and performed a dominance display with these props. The noise the canisters produced when Mike beat them together instilled fear and submission among the dominant males. This incorporation of tools into the daily performance of activity allowed Mike to become the alpha of the troop for over five years. In the book by Martin (2015), the author compares Mike's behaviour to expensive handbag purchases among Upper East Side Manhattan mothers, where the handbag is a tool used to display dominance and status.

Making the decision to choose one strategy over the other is proposed to be influenced, as indicated by proposition 3 by a combination of both individual differences and environmental cues. When an individual reaches the point where he or she must decide on an overall strategy for acquiring status, as shown in Figure 4.3 above, certain factors may influence this decision: either natural ones such as physiology and personality, or environmental cues. While it has been suggested that Prestige is the more favourably selected strategy, the literature on physiology and personality indicates there are natural conditions under which an individual will compete for status under Dominance. As mentioned in Section 4.2.2, levels of cortisol have been shown to influence a person's mood and motivation to carry out tasks, along with their perceived ability to take action; such as compete for higher status. Likewise, personality traits have been shown to influence behavioural decisions as well, including competitive and cooperative behaviours.

4.3.2 Environmental stimuli

As evolutionary psychology seeks to develop a universal system for explaining the design of the mind and the resulting behaviours, it simultaneously mediates between the realist and relativist perspectives by acknowledging the impact of environmental stimuli upon behaviour, which acts as the proximate driver of behaviour (Derksen, 2010). Thus, while it is important to understand the underlying motivations of behaviour in the form of evolutionary theory, where individuals have a universal desire for relative status, it is equally important to understand the environmental factors in which this behaviour may be demonstrated.

In the study on competitive altruism by Hardy and Van Vugt (2006), it was established that four conditions must exist in order to encourage competition. These four conditions, which build upon the notion of conspicuous consumption and cost signalling theory, are: (1) the behaviour must be costly, (2) visible, (3) send an honest signal of the individual's resource fitness, and (4) the behaviour must have a perceived long-term benefit. In the case of altruism, the high cost is often rewarded with high social status (Hardy and Van Vugt, 2006; Griskevicius et al., 2007).

These same conditions exist in other studies on conspicuous consumption, especially among neighbours. For instance, Heffetz (2011) finds in a survey of the visibility and correlating expenditure associated with normal goods that individuals regularly devote increasing percentages of their income to highly visible goods, compared to other non-visible goods. Similarly, Griskevicius et al.'s (2007) study on benevolence or helping, demonstrates that individuals are more likely to engage in helping behaviour if that behaviour is visible to others. Thus, this aspect of visibility, combined with the theory of cost signalling suggests making behaviours visible is a critical component in the decision to engage in certain types of behaviour. However, it is unknown as to what degree or the importance of the four factors identified by Hardy and Van Vugt (2006) are in the decision to compete for status, compared to individual differences.

4.3.3 Individual differences

In Section 2.8 the Theory of Planned behaviour was discussed. One of the main points of that section was that the model's limitations in predicting behavioural decisions is that it does not account for cognitive influences thought to direct behavioural decisions. Armitage and Conner (2001) suggest future models might consider perceived self-efficacy. The literature reviewed in this chapter further indicates that, personality, threat to social status and perceived resources would also be valuable factors to consider in status driven behaviour. As mentioned in Section 4.2.1, personality is thought to influence behavioural decisions; including status motivated ones (Kyl-Heku and Buss, 1996). Research exploring perceived threat to status indicates people will engage in costly behaviour if they perceive a threat or potential loss in status (Rosati and Hare, 2012; Ivanic, 2015). Lastly, individuals are thought to compete for higher status if they perceive to have the resources to compete successfully (Cummins, 2005; Lund, 2007). Incorporating these four factors into the model might aid in closing the gap between perceived behavioural control and actual behavioural control for predicting behavioural intentions. Furthermore, it may shed light on understanding and predicting how individuals seek higher status within a peer group.

Below in Figure 4.4 the model displays the proposed factors, which are thought to influence status-strategy-driven behaviour, based on the review of the literature discussed in the previous two chapters. The model discussed in this chapter and represented in Figure 4.4 incorporates both internal and external forces identified within the literature thought to influence behaviour in hierarchy negotiation. The individual differences thought to influence status driven behavioural decisions include personality type (Kyl-Heku and Buss, 1996), perceived threat to status (Piazza and Bering, 2008), perceived resources (Gilbert et al., 1995) and perceived ability or self-efficacy (Armitage and Connor, 2001). The model also considers the environmental cues thought to influence competition, identified by Hardy and Van Vugt (2006). These factors, discussed in Section 4.3.2, include the perceived cost of the behaviour, whether or not the behaviour sends an honest signal, the visibility of the behaviour and the perceived long-term benefit of engaging in the behaviour.

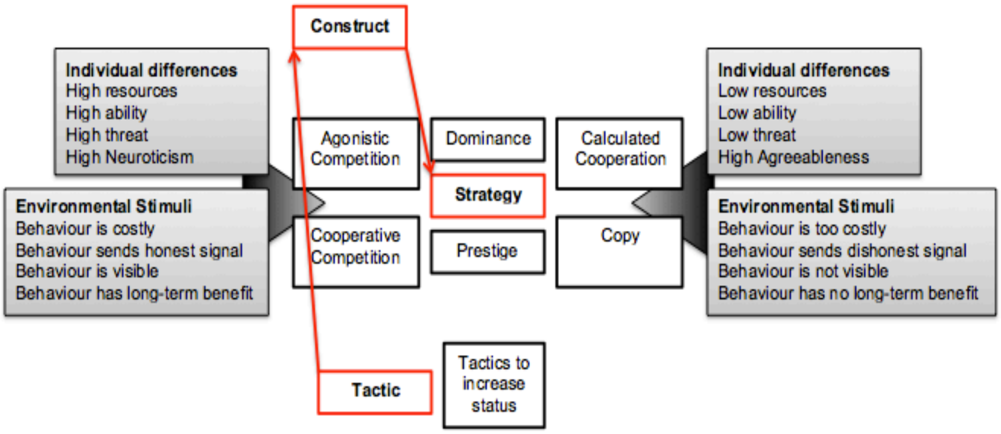

Figure 4.4: Proposed model for status seeking behaviour.

Proposition 4: The combination of Figures 4.3 and 4.4 create a theoretical model that describes the path for achieving higher status.

The model in Figure 4.4 indicates that both environmental cues and individual differences may influence not only the strategy a person will use to increase status, but also what type of competitive construct will be used. Tactics, discussed in the next section, are thought to vary by context and are therefore separate from the other components of the model.

4.4 Tactics of hierarchy negotiation

As individuals are faced with the decision to devise a behavioural rule or strategy for increasing his or her status, they must have knowledge of which resulting behaviours, or tactics, will help accomplish that. Within a social group having knowledge of socially acceptable tactics enables an individual to successfully navigate a social hierarchy (Flynn et al., 2006; Cummins, 2005). Flynn et al. (2006) suggest that those individuals that are successful in achieving higher status are more socially aware and therefore apply a greater variety of tactics to achieve status. These individuals tend to have a greater desire for status compared to others and often attempt to 'out perform' individuals that are less socially aware in completing social exchange tasks (Flynn et al., 2006, p. 1134). Kyl-Heku and Buss (1996) identify 26 unique tactics for hierarchy negotiation. They asked eighty-four undergraduate students to write down acts they considered effective for 'getting ahead' (Kyl-Heku and Buss, 1996, p. 502).

Based on the responses the authors' deduced 26 useful tactics for increasing status within a hierarchy, however they acknowledge that useful tactics vary by context. For example, a member of a motorcycle gang will use different tactics to increase move up the gang hierarchy compared to an academic navigating a university hierarchy.

One tactic, previously described in Chapter 2 is the notion of conspicuous consumption. When examined more critically using cost signalling theory, conspicuous consumption appears to be a useful tactic for demonstrating and increasing status. Conspicuous displays of consumption have been shown to demonstrate an individual's ability to withstand the high costs of wasting money. The act of conspicuous consumption not only signals status but also serves as a tactic for achieving status under a larger strategy for achieving and maintaining status (Sundie et al., 2011). However, the possession of luxury goods in today's society, where credit is easy to come by or copies of luxury brands are easy to acquire, does not necessarily send a true signal of an individual's ability to incur costs; it signals the perception of this ability (Nia and Zaichkowksi, 2000; Griskevicius et al., 2007; Ordabayeva and Chandon, 2011). Conspicuous consumption represents one tactic for navigating as a social hierarchy.

This thesis explores the paths to higher status within the context of pro-environmental behaviour in an online community, where the tactics of hierarchy negotiation may mimic those of other online social networks or communities.

The following sections describe three possible tactics for navigating a social hierarchy within the context of this thesis, an Instagram community of pro-environmentalists. The first tactic is pro-environmental behaviour, the main type of behaviour studied within this thesis. Next altruism is discussed, as pro-environmental behaviour is often perceived to be altruistically motivated. Lastly, the section discusses humour as a useful tactic for hierarchy negotiation, a type of behaviour often used in online environments (North, 2007). The discussion on each of these tactics focuses not only on how they represent a tactic but also how they could be used under both strategies for status. For instance, conspicuous displays of altruism have been shown to be used competitively and cooperatively. Humour provides an interesting example in which a tactic requiring high intelligence is demonstrated in both a competitive and cooperative manner.

4.4.1 Pro-environmental behaviour

In Section 2.4 pro-environmental behaviour (PEB) is defined as behaviour that reduces the negative impact humans have on the environment. Demonstration of PEBs signals to others concern and care for the environment and is considered to be altruistically motivated behaviour (Stern, 2000; Griskevicius et al., 2010). Defining PEBs as an altruistically motivated behaviour stems from the notion that the environment is a public good, therefore behaviour that preserves it, either directly or indirectly, is a type of pro-social behaviour (Stern, 2000; Batson, 1998; Griskevicius, 2010).

Pro-social and altruistic behaviours are defined as behaviour that sacrifices the resources of one individual for the benefit of others (Griskevicius et al., 2010). For instance, purchasing a hybrid electric vehicle such as a Toyota Prius signals to others that you prefer to drive a car that uses less petrol, thus reducing the amount of greenhouse gases released into the atmosphere (Griskevicius et al., 2010). This highly visible act of consumption thus elevates an individual's pro-social status among peers, informing them of a concern for the welfare of others. Griskevicius et al. (2010) found that by eliciting status motives in study participants it increased the likelihood of choosing an environmentally friendly product as opposed to a luxury product under laboratory conditions. This occurred despite the often low-performance and higher price associated with green products compared to standard, or even luxury products.

During the experiment participants were asked to choose which version of three products they would purchase. The choice was between a high-end luxury version and the more environmentally-friendly counterpart. The products were dishwashing soap, a washing machine and a car. Griskevicius et al. (2010) found that status motives, such as when choices were made public, increased the inclination for the environmentally-friendly products, even when the price for the green product was 20 per cent higher than the alternative product. This form of consumption signals to others that the purchaser is able to incur the costs, such as a higher price tag and less efficient performance and therefore increases their perceived prestige, or pro-social status, again relating to cost signalling theory (Griskevicius et al., 2007, 2010).

This study demonstrates competitiveness between participants utilising pro-environmental behaviours. The choices made during the experiment consist of many of the same environmental conditions in the study on competitive altruism by Hardy and Van Vugt (2006). In the study by Griskevicius et al. (2010) the purchase decisions were made visible, came at a high cost, sent an honest signal about one's resources and had a perceived long-term benefit. Hardy and Van Vugt (2006) describe these conditions as necessary for an individual to compete via altruism. Given the link between altruism and PEBs it can be concluded that in order for PEBs to be a useful tactic to compete for status, these conditions must be met. The link between PEBs and altruism rests upon the perception that most PEBs incur a cost upon the actor, while providing a benefit to others (Griskevicius et al., 2010). The benefit to others in this case is the protection of a public good, the environment (Stern, 2006).

Pro-environmental behaviours have also been shown to be used in the cooperative sense. The study by White et al. (2013), previously discussed in Section 2.9, conducted studies to determine when normative appeals to PEBs are at their most effective. The study found that when activating the collective self through descriptive normative messages, individuals were more willing to participate in recycling behaviours.

The study by White et al. (2013) highlights the impact of normative messaging, however, on a deeper level it indicates the underlying motive to affiliate oneself with a larger group. Cooperation and copying group behaviours helps to achieve this by tying into in-group behaviours. An individual who identifies him or herself with an in-group will alter his or her behaviour to match that of the others to ensure membership (Henrich and Gil-White, 2001; White and Dahl, 2007). White et al. (2013) utilises Social Identity Theory (Tajfel and Turner, 1979) to help explain the underlying motives behind the effectiveness or ineffectiveness of normative messaging. According to Tajfel and Turner (1979) identity comprises of an individual's self-concept through the perception of belonging to various groups. This social identity varies by context, where an individual may identify him or herself as a student when in an academic setting, or may identify as an American when in a social setting consisting of people from various countries. This categorisation of the self varies with the situational context and depends on positive in-group distinctions (White and Dahl, 2007; Ferguson and Ford, 2008). Individuals make inter-group comparisons in order to build a positive social identity, where out-groups are perceived negatively compared to in-groups (White and Dahl, 2007; Ferguson and Ford, 2008).

PEB is shown to be a tactic for hierarchy negotiation that can be used competitively and cooperatively. There has been little research on manipulative, coercive forms PEB or agonistic contests of PEBs. The next section discusses altruism as a tactic of hierarchy negotiation; it is also thought to be the main motivation behind PEBs.

4.4.2 Altruism

Altruism, previously defined in section 3.2.1, is often considered counter-intuitive behaviour due to the large costs placed upon the actor of these behaviours, especially when aimed at non-relatives (Griskevicius et al., 2007). Yet forms of altruism are widely observed, not only among humans but also among other animals when not aimed at kin. Despite the high cost associated with altruistic behaviours, Trivers (1971) shows that natural selection favours this type of behaviour because of the long-term benefit altruism provides, and exemplifies Reciprocal Altruism Theory. Trivers (1971) discusses three instances where natural selection favours altruism, as opposed to cheating or free-riding behaviour; these include cleaning symbiosis, warning calls against predators and human forms of altruism.

In the instance of cleaning symbiosis, large fish, such as a grouper (*Epinephelus*) are often cleaned of ectoparasites by smaller fish, such as *L. dimidiatus*. The small cleaner fish are able to safely feed themselves, while the grouper experiences high costs. The grouper must put forth great energy to avoid eating the cleaner fish. The grouper also puts forth effort to signal to the cleaner fish when it wishes to swim away and fight off potential predators on the cleaner fish (Trivers, 1971). Despite these large costs, the grouper still maintains the symbiotic relationship because of the long-term benefit the cleaner provides: the repeated removal of parasites.

Similar behaviour is exhibited in several species of birds. When a bird observes an approaching predator it will give off a warning signal to the other members of the flock so they may escape danger. The signal comes at a large cost to the signaller because it draws the attention of the predator to that bird, thus making it more difficult to escape danger or death (Trivers, 1971). Selection of this trait will be favoured because it ensures reproduction of the trait for providing warning signals against predators.

Trivers (1971, p. 45) identifies five key behaviours which occur at a small cost to the giver and provide large benefit to the receiver. These include:

1. Assisting in times of high risk or danger;
2. Sharing food supplies;
3. Aiding the wounded or sick;
4. Sharing tools or equipment; and
5. Sharing knowledge or expertise.

Trivers (1971) theorises that engaging in these key behaviours will lead to future benefits in which cooperative behaviours will be reciprocated. For example in hunter-gatherer groups it has been found that altruistic behaviours, such as sharing food, continued even if the group was above the optimum group size. Trivers (1971) suggests there are many adaptations in place to maintain optimum group size, however, even when group size has been seen to go above the optimum for survival of all members, altruistic behaviours do not decrease. He suggests this evidence shows that human altruism is largely based on reciprocity as opposed to kinship.

Other researchers suggest that Trivers' (1971) theory on reciprocal altruism does not fully describe the reasoning behind non-kin acts of altruism, especially when there is no foreseeable reciprocity (Hardy and Van Vugt, 2006; Griskevicius et al., 2007). Instead, it has been suggested that the high costs associated with altruism act to elevate the status of an individual. Again by linking altruism to cost signalling theory, forms of altruism demonstrate an individual's ability to withstand the high costs associated with it. While altruism is often perceived to be solely cooperative, evidence suggests it can also be used as a form of competition (Hardy and Van Vugt, 2006). In this case, altruism is perceived to be as costly as conspicuous consumption of luxury goods (Griskevicius, et al., 2007). As individuals seek higher forms of status, they may choose to engage in more competitive forms of altruism.

In the study by Hardy and Van Vugt (2006), participants in groups of three, were asked to play a public goods game, where individuals given 100 pence were asked to contribute a portion of their private fund to the group fund. Any money provided to the group fund would be multiplied by two and divided equally among the three members of the group, thus there is greater benefit for each individual to keep more money for themselves.

After an initial round of playing the contribution game the amounts given to the group fund by each of the participants was shared with all members. The next round of play showed an increase in contributions to the group fund, when there was a risk of losing status within the group by not contributing as much or more than others (Hardy and Van Vugt, 2006). Upon completion of each round participants were asked to complete a short questionnaire asking about the perceived status of the other group members. Group members that contributed greater amounts of their endowment to the group fund were perceived to be of higher status, thus providing evidence that costly behaviours are rewarded with higher social status within a peer group.

Experiments conducted by Duffy and Kornienko (2010) further support this notion that competitive altruism is driven by an innate desire to outperform against rivals. They utilise *dictator contests*, where participants are placed in pairs where one person, the dictator, must divide money given to them between the two. In this case the dictators were given USD 10 (roughly GBP 5.89) to distribute between themselves and their partner. In the contest fifteen pairs play ten rounds of allocation tasks and each dictator is compared to the other 'dictators' playing at the same time. Between rounds each dictator is provided information on how they rank compared to other dictators, where rank may be based on how altruistic the dictator is, how selfish the dictator is, or rank is randomly assigned. In the selfish condition, individuals that kept more money for themselves were publicly ranked higher, thus incentivising selfishness. In the altruistic condition, the dictators who distributed the funds more equally saw their rank increase through the duration of the contest. Participants in the random condition were assigned rank randomly, thus neither selfishness nor altruism were rewarded.

Duffy and Kornienko (2010) explain that the instance of higher giving in the altruistic condition is a result of underlying competitive motives. As individuals in the altruistic condition see their rank increase as they distribute money more equally, they are motivated to compete for higher status through giving. These findings of heterogeneous behaviour, which Duffy and Kornienko (2010) describe, may have important consequences for the broader domain status strategies among individuals; further suggesting that while competing via altruism does exist, there could be other factors involved which explain differences in observed behaviour. Greengross and Miller (2008) suggest personality plays a part in how an individual uses humour under a larger strategy for status; this may also be the case with the tactic of altruism.

4.4.3 Altruism as a tactic for status

In section 4.3.1 it was suggested that an individual of high status might engage in status-seeking behaviours when confronted with a threat to his or her current status. Studies examining conspicuous altruism suggest that pro-social behaviours may help to maintain and elevate an individual's status within a peer group, as well as avoid a loss in status (Hardy and Van Vugt, 2006; Wischniewski et al., 2009; Berman et al., 2015). One study that provides an example of how conspicuous altruism helps avoid a loss in status was conducted by Piazza and Bering (2008), which investigated the effects of gossip on an individual's motivation to behave altruistically. When study participants encountered a threat to his or her reputation, they were more inclined to behave altruistically.

The study assigned participants the role of either Allocator or Receiver in a classic economic Dictator game (Piazza and Bering, 2008). The Allocator was given 10 tokens with each token representing an opportunity to enter a raffle for a prize while seated in a room with the experimenter and a confederate. The Allocator was instructed to divide the tokens between themselves and the Receiver, who was seated in a different room. Prior to allocating the tokens to the Receiver, the confederate would ask the Allocator questions about what classes they took or what dorm they lived in, thus making the Allocator identifiable beyond the experiment. If the Allocator had been selected to receive the threat of gossip, he or she was informed that the Receiver would be able to share the allocation results with the confederate (Piazza and Bering, 2008). This potential threat to the Allocator's altruistic reputation led to a more equal distribution of tokens allocated to the Receiver, compared to the control condition where no such threat existed, thus, increasing the Allocator's status with the confederate (Piazza and Bering, 2008). This study shows that conspicuous altruism not only increases status within a peer group, but also that individuals will engage in altruistic behaviours when faced with the threat of a loss in status or reputation.

A study by Lee and Shrum (2012) exhibited similar results among individuals that were rejected by peers. Study participants were instructed to engage in an online discussion on a current topic in the media with two other individuals. The other people in the online chat were confederates and instructed to either engage in conversation with the participant for the control condition or reject his or her ideas on the topic discussed (Lee and Shrum, 2012). Upon completion of the study participants were given seven $1 bills and a letter from a charity asking for a donation. Individuals that were under the test condition of being rejected donated money to the charity 100% of time (Lee and Shrum, 2012).

Both the studies by Piazza and Bering (2008) and Lee and Shrum (2012) indicate a relationship between visibility, altruistically motivated behaviour and status. Individuals seeking to gain acceptance or prevent a loss in reputation may be more inclined to actively seek higher status via pro-social behaviour.

4.4.4 Sources of altruism

This section will explore altruism from other perspectives to help build the case that altruism is a tactic that can be used under both a Dominance and Prestige strategy for status. Altruism towards non-relatives is considered a form of social exchange, which can be observed across cultures, species and time, such as sharing food among early hunting tribes, potlatching, and symbioses among species (Buss, 2007). There is a debate within the literature regarding the underlying motives associated with acts of altruism. On the one hand it is considered to provide long-term benefits to the actor, provided reciprocity exists among the social group. On the other hand altruism is considered an act of pure self-interest in that it is conducted with the view that the actor will receive the benefit of increased status and greater access to resources. The remaining paragraphs of this section discuss these two perspectives.

Cialdini et al. (1997, 1987) examine the idea of cooperation via helping, a form of altruistic or pro-social behaviour. They posit that empathy-based altruism or helping is not wholly selfless behaviour. Their first study (1987) shows that when individuals observed another person experiencing pain or needing help, the observer felt sad and thus increased their instances of helping. The levels of empathy toward the subject were constant but levels of sadness changed. Individuals wanted to stop feeling sad so they helped more in order to elevate their own mood (Cialdini et al., 1987). This evidence ties into the work by Hardy and Van Vugt (2006) where they suggest that the high cost of altruistic behaviours results in a type of reward for the actor. They suggest it is in the form of higher status, but it could also be a perceived change in status based on mood elevation, as Cialdini et al. (1997) observed. Batson (1997) provides an alternative view, largely disagreeing with the work of Cialdini and colleagues. He suggests there are two types of motive relevant in the instance of helping; egoistic motives, which elicit the goal of benefiting one's own welfare and altruistic motives, which in turn have the goal of benefiting another's welfare; as opposed to the view that altruism is both beneficial to the actor and the recipient (Batson, 1997; 1998). However, mounting evidence suggests altruism is both beneficial to the actor and the recipient (Buss and Kenrick 1995; Cialdini et al., 1987, 1997; Hawley, 1999). Even if an individual is fully aware of the benefits or not, they do receive some reward from behaving altruistically, whether it is to feel better (Cialdini et al., 1987), to gain acceptance (Lee and Schrum, 2012), to acquire resources, or to increase status (Griskevicius et al., 2010; Cheng et al., 2013).

Bothner et al. (2012) shows how group norms can inhibit or restrict altruistic behaviour based on rank, where higher-ranking members have fewer restrictions on behaviour. Yet, work by White et al. (2013) intimates that norms can be quite persuasive in encouraging altruistic behaviours through descriptive and injunctive normative messaging. Thus, another perspective in the instance of cooperation is that norms may dictate cooperative behaviour. A study by Chen et al. (2010) examines this concept in an online environment, where peer groups are less visible. In this case Chen and colleagues examine movie reviewing behaviours before and after receiving social information on individual performance on the website MovieLens. Members of the website rate and recommend movies for others to view. The rating system behaves as a public good because movies that a user rates ultimately enhances future recommendations for that user by allowing the site's algorithm to understand that user's preferences, but also enhances the recommendations for other users as more users rate a specific movie.

Despite the dynamic evidence discussed in Chapter 2 on the power of normative messaging in encouraging pro-environmental behaviour it is crucial to recall there are instances of having the opposite effect on behaviour, as demonstrated in the Schultz et al. (2007) study. This evidence combined with evidence from another study by Chen et al. (2010) exploring the influence of social information indicates that normative messaging as utilised widely within social marketing campaigns may not have the impact governments are looking for when they seek to change individual behaviour. Yet these theories on normative behaviour are subsumed by the evolutionary adaptation to subconsciously copy others and the desire for relative status, thus enabling an understanding of the underlying motivation to adhere to norms (Griskevicius et al., 2012).

4.4.5 Humour

In addition to altruism and PEBs, humour is a psychological adaptation valued among human social groups, as well as other social primates (Greengross and Miller, 2008). From the evolutionary perspective, humour and laughter emphasises a lack of danger within a local environment, thus alleviating stress (Hodson et al., 2010). Individuals who possess the ability to express humour signal a high level of social intelligence (Hodson et al., 2010). Robinson and Smith-Lovin (2001) define humour to be part of a continual interaction where all comments may or may not be intended to result in amusement. This amusement, however, can vary in its function, either affiliation and differentiation. Hodson et al. (2010) indicate the line between affiliative and disassociative humour is a very delicate one, and often depends on the status of the recipient of a joke.

It has been observed that groups turn to differentiating humour when comparing themselves to lower status individuals (Robinson and Smith-Lovin, 2001; Hodson et al., 2010). The literature suggests humour is a useful method for identifying social mechanisms and structures, within these structures it serves as an acceptable form of aggression, aiding the formation of social hierarchies (Robinson and Smith-Lovin, 2001; Huuki et al., 2010). Disparaging remarks veiled in humour allow individuals to separate themselves from out groups which helps maintain a sense of status (Robinson and Smith-Lovin, 2001). This notion is reinforced by Hodson et al. (2010), who demonstrate that humour acts as a 'legitimizing myth', in that humour does reinforce notions of dominance over out groups and negative intergroup relations, especially if it has an intonation of sexism or racism, where it indicates derogatory views about an out group. This observed duality in the expression of humour, and the ways it is affiliative and disparaging, demonstrates that it can be used either as part of a Dominance strategy or Prestige strategy for status.

Further evidence of the duality in the expression of humour is demonstrated by Robinson and Smith-Lovin (2001). They observe humour in 29 separate task-oriented group discussions, where a group of six individuals must create a task or problem for another group to solve. A set of patterns emerged from the results of their study which suggest humour is used as a tactic for high status. The patterns observed among the results include: men tell more jokes and receive laughter as a response more often than women; in all female groups, women tell more jokes in the absence of men. And lastly, an individual who frequently participates in and interrupts discussions often receives a more positive response to demonstrations of humour (Robinson and Smith-Lovin, 2001). The patterns observed by Robinson and Smith-Lovin (2001) tie into the notion that humour acts as a form of aggression and status within a hierarchal group, in addition to enhancing affiliation. To demonstrate the affiliative qualities of humour, Robinson and Smith-Lovin (2001) find that humour serves to create group cohesion among same-status group members, where humour helps to maintain and establish cooperative relationships. Humour, in this instance helps build group cohesion through making jokes about the group as a whole or about a rival group. Groups have been shown turn to differentiating humour when comparing themselves to lower status individuals or out-groups, this in turn helps strengthen bonds within the group while the attention is focused on a common enemy, so to speak (Robinson and Smith-Lovin, 2001; Hodson et al., 2010).

In an attempt to better understand the use of humour within a social hierarchy, Huuki et al. (2010), conducted in-depth interviews over seven years with adolescent males in Finnish schools. They found that throughout primary and secondary school, males demonstrate aggression and violence under the guise of humour to achieve high status as they compete with rivals (Huuki et al., 2001). With high status comes the benefit of mate attraction and retention. Greengross and Miller (2008) elaborate on the different ways individuals use humour by identifying two types of negative humour, self-depreciating or other-depreciating humour. These negative types of humour are compared to two positive types of humour, affiliative and self-enhancing. The study by Greengross and Miller (2008) indicates that males seeking the attention of a female will more often take a high-risk approach utilising negative forms of humour to either paint themselves or their rivals in a negative light, this is especially prevalent in intra-sexual competition. This high-cost behaviour can be explained by cost signalling theory, where the individual utilising humour demonstrates a high-level of intelligence or cognitive skill, but doing so in a manner that depreciates themselves or others indicates the ability to withstand the potential risk (loss in reputation or physical retaliation from rival) associated with consequences of using it (Greengross and Miller, 2008).

The examples discussed in this section demonstrate that humour can be a useful tactic and Robinson and Smith-Lovin (2001) indicate that humour can be used both cooperatively and competitively.

4.5 Summary of the proposed model

This chapter presented the existing knowledge on the Dominance and Prestige strategies for status. A review of the literature indicated the decision for engaging in one strategy over another is influenced by several complex cognitive and social factors. These factors were then compiled into a proposed model for how the path or route to higher status might work. The chapter also included five theoretical propositions based on assumptions from the literature review. This data collected for this research, as described in the next chapter, will either support or abandon these propositions in accordance with the research objectives. Those propositions are:

> Proposition 1. Dominance and Prestige are the two distinct and separate strategies for achieving status.
>
> Proposition 2a. Based on the reported characteristics of Prestige, cooperative competition and copying, it is proposed under a Prestige strategy for status cooperative competition is a direct competitive construct and copying is an indirect competitive construct.
>
> Proposition 2b. Based on the reported characteristics of Dominance, agonistic competition and calculated cooperation, it is proposed under a Dominance strategy for status agonistic competition is a direct competitive construct and calculated cooperation is an indirect competitive construct.
>
> Proposition 3. Individual differences, such as perceived self-efficacy, and social cues influence the use of one strategy over another.
>
> Proposition 4: The combination of Figures 4.3 and 4.4 create a theoretical model that describes the path for achieving higher status.

The next chapter on methodology indicates how these propositions align with the research objectives and the methods most appropriate for responding to them.

Lastly, the chapter described how tactics for hierarchy negotiation work and three possible tactics for the context of this thesis, pro-environmentalism, altruism and humour. The next chapter will discuss the methodology for this thesis.

Chapter 5: Methods

The aims of this chapter are:

- To describe the philosophical underpinnings that shape this thesis.
- To describe the methods used for collecting data in order to fulfil the research objectives.
- To discuss the analytical strategy for the data analysis.

This chapter discusses the methodological and philosophical framework for fulfilling the research objectives. The overall research aim is to build upon the existing evolutionary psychology theory of status by explaining how individuals use tactics identified through cost signalling theory, such as pro-environmental behaviour, humour, or time, in order to gain social status within a peer group. This research will further explore how and when individuals use either a Prestige strategy for status or a Dominance strategy for status. The main research question, first discussed in chapter 1 is: Can cost signalling theory and the universal desire for status help provide critical insight into how and why people engage in pro-environmental behaviour?

The research objectives from chapter 1, which underpin the overall research aim, are:

1. To identify patterns which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members;

2. To explore how people compete for higher status within an online community called the Litterati, a subculture of pro-environmental behaviourists;

3. To better understand the paths or routes people use to achieve social status within a hierarchy;

4. To evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community; and

5. To discuss how a strategy for social status, competition and tactics can be applied to the theory of the universal desire for status.

The methods used to fulfil the research objectives include netnography, semi-structured interviews and self-assessment surveys of volunteer participants. Studies in evolutionary psychology are typically quantitative, however Fussell and Stollery (2012) argue that due to the complexity of certain types of behaviour, qualitative based methods are better suited to capture the multi-dimensionality of behaviour, in their case, romantic jealousy. Given the complexity of the behaviour explored within this research, a qualitative approach is used, and further justified by combining a critical realist ontology with the evolutionary psychology epistemology.

5.1 Philosophical foundations of research; and the link between theory and practise in research

There are two main antecedents to the modern philosophy of research. They reflect the method of developing knowledge, and the nature of reality and 'truth' (Rosenthal and Rosnow, 1991; Crowther and Lancaster, 2008). These two approaches are termed epistemology and ontology and serve to describe what we know and how we know it (Crowther and Lancaster, 2008; Gannon, 2002). Ontology is a branch of metaphysics that addresses the nature of reality (Burell and Morgan, 1979). It seeks to identify whether reality truly exists or whether it is simply the product of one's own consciousness (Burell and Morgan, 1979). Ontology investigates whether or not the world is externally observable (Crowther and Lancaster, 2008), or as Carolan (2005) puts it, what *is* or what *exists*. Epistemology is the investigation of the basis of knowledge concerning reality, it is what we know and understand about objects under investigation, and thus serves as the primary assumption for the scientific method (Gannon, 2002; Crowther and Lancaster, 2008). A second assumption of epistemology argues that the world can be observed systematically and analysed to produce empirical evidence in which true statements or laws can be made about the world (Rosenthal and Rosnow, 1991; Holden and Lynch, 2004). These foundations of philosophy have evolved over time and now reflect the assumptions a researcher makes when developing a theory (Burell and Morgan, 1979; Holden and Lynch, 2004; Crowther and Lancaster, 2008). These assumptions ultimately guide a researcher's theory development and methods undertaken in research, thus linking the theoretical perspective with research practice.

5.2 Philosophical research paradigms

To better understand a research methodology it is important to discuss the foundations of research philosophy. Within social science two distinct positions exist, subjectivism and objectivism, which emerged as a means to keep methods used in social sciences and natural sciences distinct and separate (Holden and Lynch, 2004). Traditionally, the objectivist view has been that the world is real and knowledge is both identifiable and communicable (Holden and Lynch, 2004). Conversely, subjectivists argue that social and natural sciences are inherently different and should remain so, even in the systematic analysis of the world. Every discipline makes assumptions of how the world works and how it should be explained. These assumptions, or principles, refer to a specific ontology, epistemology, human nature and methodology along the continuum between subjectivist and objectivist philosophies within social and behavioural science (Burell and Morgan, 1979).

The first assumption regarding ontology refers to the researcher's sense of reality and whether or not reality exists outside of the mind (Holden and Lynch, 2004). Epistemology extends to what the researcher assumes to be true or false and how that can be determined, along with what knowledge can be obtained (Burell and Morgan, 1979). The third assumption addresses human nature and its relationship with the environment, and whether or not an individual (human or nonhuman) or nature is in control (Burell and Morgan, 1979; Rosati and Hare, 2012). Lastly, the methodology refers to the tools available to the researcher for examining the social world (Holden and Lynch, 2004). The previous three assumptions will ultimately direct a researcher to adopt certain methodologies (Burell and Morgan, 1979). Exploring these assumptions establishes the justification for the research process and will be discussed here.

Each philosophical assumption has a corresponding position, which either relates to the subjectivist or objectivist philosophy (Burell and Morgan, 1979). These positions are summarised below in Figure 5.1. Knowing and understanding these assumptions helps a researcher to open their minds to alternative methods of research and maintain confidence in their results from their chosen methodology (Holden and Lynch, 2004).

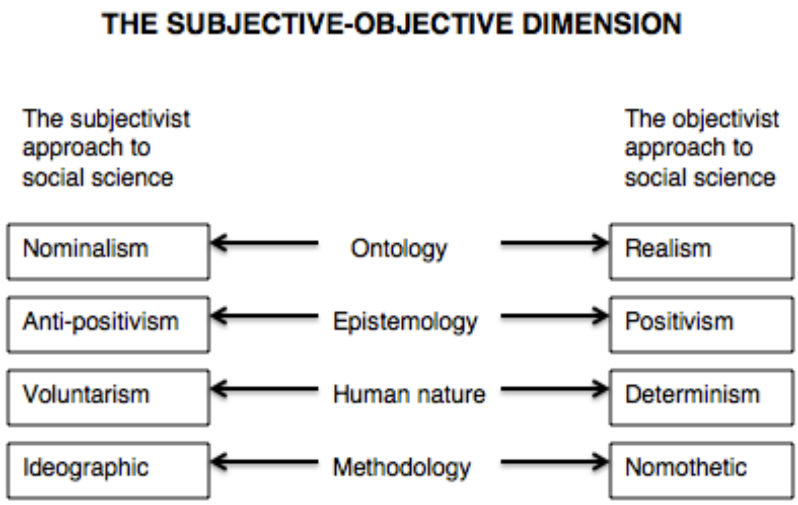

Figure 5.1: The subjective-objective dimensions
Source: Burell and Morgan (1979). The figure describes the main views on different assumptions between the two main research philosophies, subjectivism and objectivism.

5.2.1 Positions within the subjectivist-objectivist dimension

Burell and Morgan (1979) describe each position on the subjective-objective dimension. As scientific inquiry evolved so too did the philosophical paradigms in which scientific inquiry is organised. In Table 5.1 the four main paradigms (positivism, post-positivism, pragmatism and constructivism) that emerged from the subjectivist-objectivist dimension, along with the core assumptions they make, are summarised. According to Burell and Morgan (1979) the subjectivist/relativist/constructivist position does not acknowledge the existence of any real structure to the world. Concepts, names and labels exist only as tools to describe and make sense of the external world and reality exists only in the imagination (Burell and Morgan, 1979; Holden and Lynch, 2004). At the other end of the spectrum is realism/positivism/objectivism, which holds that the social world exists on its own; the individual does not create it (Burell and Morgan, 1979). Realists often contend that the world existed before humans and will continue to exist after humans; in other words the existence of the world is not dependent upon human presence to label it (Holden and Lynch, 2004). In applying these notions to the scientific method, realism posits that scientific theory provides a true account of the world (Rosenthal and Rosnow, 1998). With the development of the scientific method came the demand for greater flexibility between the subjectivist-objectivist dimension, such as critical realism.

Paradigm	**Positivism (objectivist)**	**Post-positivism**	**Pragmatism**	**Constructivism (subjectivist)**
Methods	Quantitative	Primarily quantitative	Quantitative and qualitative	Qualitative
Logic	Deductive	Primarily deductive	Deductive and inductive	Inductive
Epistemology	Objective point of view. Knower and known represent a dualism.	Modified dualism. Findings probably objectively 'true'.	Both objective and subjective points of view.	Subjective point of view. Knower and known are inseparable.
Axiology	Inquiry is value-free.	Inquiry involves values, but they may be controlled.	Values play a large role in interpreting results.	Inquiry is value-bound.
Ontology	Naive realism	Critical or transcendental realism.	Accept external reality. Choose explanations that best produce desired outcomes.	Relativism
Causal linkages	Real causes temporally precedent to, or simultaneous with, effects.	There are some lawful, reasonably stable relationships among social phenomena. These may be known imperfectly. Causes are identifiable in a	There may be causal relationships, but we will never be able to pin them down.	All entities simultaneously shaping each other. It's impossible to distinguish causes from effects.

		probabilistic sense that changes over time.		

Table 5.1: Comparison of four paradigms used in social and behavioural sciences. Source: Tashakkori and Teddlie (1998).

5.2.2 Critical realism

Critical realism (CR) emerged from existing philosophies as a way of avoiding the two extremes. It views the world is indeed independent of the researcher, however, knowledge obtained of the world is dependent upon social influences (Bhaskar, 2008; Morais, 2011; Barron, 2013; Zachariadis et al., 2013; Rees and Gatenby, 2014). Bhaskar (2008) divides knowledge into two categories, *intransitive* and *transitive.* Intransitive knowledge refers to the material objects that would continue to exist without our knowledge of them. For instance, gravity would still occur if we did not have a law to describe it. Transitive knowledge refers to the law we use to explain gravity, the process we use to describe and acquire knowledge of the world around us. Bhaskar (2008, pp. 14) goes on to argue that an 'adequate philosophy of science' needs to reconcile both the transitive and intransitive aspects of science.

By adopting this philosophy, one seeks to identify and explain the causal mechanisms behind events by taking a multi-dimensional approach, as shown in Figure 5.2 (Barron, 2013; Johnston and Smith, 2014). A researcher's knowledge of the world is influenced by the social, economic and political conditions under which he or she understands the world. The objects of knowledge are considered enduring structures and mechanisms, which would continue to function without our knowledge of them (Bhaskar, 2008).

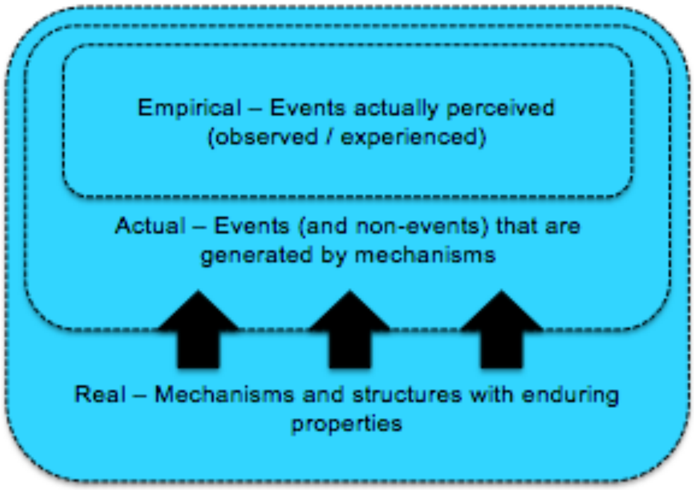

Figure 5.2: Stratified ontology of critical realism.
Source: Johnston and Smith (2014) and Zachariadis et al. (2013).

Morais (2011, p. 67) defines a causal mechanism as the process 'by which a structure is activated' and he describes a structure as when two objects that mutually constitute each other (manager and subordinate) form a structure. The structures have causal powers to generate events and therefore have 'susceptibilities to certain kinds of change' (Morais, 2011, p. 67). The precise effect will depend on the external context. So two or more related objects may or may not lead to a certain outcome based on the environmental factors/cues. But because we can never fully reach truth or facts we can never fully understand the causes or mechanisms. Theory within evolutionary psychology is largely based on historical data; observational behaviour in relation to the primitive brain can never fully be explained. Thus critical realism tries to both explore and explain as much as possible. We can only make assumptions based on the interpretation of historical artefacts and observation of both present day human and other animal behaviour, this is further supported by the notion within CR that the world exists independently of our knowledge of it but the production of knowledge is a social practice that influences its content.

5.2.3 Triangulation in Critical Realism

Researchers seek to maximise three conflicting goals and often choose multiple methods in an effort to best fulfil these goals. The goals are generalisability, precision and realism (Simpson and Campbell, 2005). Generalisability seeks to generalise results across populations; results are aimed to be precise; and the context of the variables should reflect a realistic situation (Simpson and Campbell, 2005; Rosenthal and Rosnow, 1991). Beyond the three competing goals of generalisability, precision and situational realism for research described by Simpson and Campbell (2005), there is the added concern of validity.

Validity for empiricists traditionally refers to the quality and rigour of research, where researchers aim to determine causation among empirical events (Zachariadis et al., 2013). In the critical realist context, validity aims to determine whether or not the proposed causal mechanisms are linked to observed events (Ibid.) Critical realism overcomes issues in validity, where validity in positivism realise solely on the empirical, validity in critical realism is multi-dimensional (Johnston and Smith, 2010). Validity in this instance is approached by three dimensions: construct validity, internal validity and external validity. Table 5.2 summaries the key differences of each form of validity from both the critical realist research method and the empiricist research method (Johnston and Smith, 2014).

	Empiricism	*Critical Realism*
Construct validity	Whether the measure is consistent with the theoretical description of the construct.	Whether data that are empirically available give valid knowledge about the actual manifestation of the purported generative mechanism in the laboratory.
Internal validity	Whether observed changes can be attributed to the research intervention rather than other possible influences.	Whether actual events are manifestations of the particular generative mechanism in the laboratory circumstance.
External validity	Whether the researcher can infer the pressured causal relationship generalises to and across alternative measures of the cause and	The likelihood that similar or related events that occur (or might occur) in other settings are caused by the generative mechanism that caused the

	effect and across different types of people, settings and times.	actual events in the laboratory.

Table 5.2: Validity in Critical Realism.
Table adapted from Johnston and Smith (2014).

A multi-method approach, such as the inclusion of surveys, is suggested as a means of producing stronger evidence to support scientific predictions (Simpson and Campbell, 2005). Construct validity reflects the observable reality of data collected yet also considers the social influence on the perception of observed experiences. Internal validity considers the underlying causal mechanisms behind the observed events, which are then linked to theory. Lastly, external validity is concerned with the generalisability of the observed events, beyond the experimental conditions. Construct validity in critical realism is achieved by relating empirical data to actual events, whether those events are socially constructed or not, as opposed to theory. Internal validity is established through triangulation where the mechanism is explained, it operates as described and alternative explanations are eliminated. For instance, self-reported data, is compared to observed data (Johnston and Smith, 2014). External validity is realised by constructing a controlled event which reproduces the same causal mechanisms that would be observed in the real world. Applying the critical realist ontology to the evolutionary psychology epistemology ensure greater validity to this research within the larger social science domain.

5.2.4 Critical realism and evolutionary psychology

Critical realism is an ontological position that acknowledges the existence of a reality outside of our knowledge of it, however that knowledge can never fully be realised (Morais, 2011; Barron, 2013; Zachariadis et al., 2013; Rees and Gatenby, 2014). Given that the conceptual framework for this research is based on theories within evolutionary psychology, which are shaped by both environmental stimuli and adaptive mechanisms, CR is the most appropriate philosophy to adopt for this research. Where evolutionary theory adopts an ontological position that the world does exist independently of human knowledge of it, many of the theories are developed from historical data and artefacts, whose interpretation of their meanings are influenced by social structures. Critical realism allows for research and method design that bridges the gap between empirical evidence and social constructs, something that is necessary in gaining a full understanding of the cause and effect relationship of human behaviour (Miller and Tsang, 2010).

5.2.5 Paradigmatic stance of this research

Further exploration in the critical realist literature demonstrates strong links between evolutionary psychology methods and research design, and critical realism. Buss (2007) explains that while evolutionary psychology research seeks to contribute to evolutionary theory, studies in the field are often focused on the outcome effects of environmental stimuli, where the individual responses may be linked to evolved psychological mechanisms. Similarly, critical realists place less focus on empirical results and place more focus on understanding causal mechanisms (Miller and Tsang, 2010). It is the critical realist perspective that mediates between ontology and epistemology, where the world is considered to exist outside the mind, yet the mind of the researcher may be socially constructed (Miller and Tsang, 2010). Where evolutionary psychology and critical realism converge is the focus on explaining and understanding why behaviours occur the way that they do (Johnston and Smith, 2014). Where they differentiate is in explanation: critical realism seeks to provide an explanation of an observed event or experience with the surrounding social structures. Evolutionary psychology aims to go beyond social structures to examine the underlying causes of an observed experience or event as a function of the brain. Thus this research combines critical realism ontology with evolutionary psychology epistemology.

5.3 The research process for critical realism and evolutionary psychology

The research process outlines the logic involved in carrying out a research methodology, which establishes an outline for creating and testing theory. Miller and Tsang (2010) outline two keys ways in which critical realist methods may overcome the obstacle of both creating and testing theory, an obstacle this research must also overcome. It is advised when creating and testing theory using critical realism to 'identify and measure the relevant mechanisms in play in a situation and test for conjunctions of mechanisms as explanations for empirical outcomes' (Miller and

Tsang, 2010; p. 147). Miller and Tsang (2010) further posit four steps for testing theory using a critical realist approach, especially in management where all mechanisms may not easily be observed or identified. These steps include the following:

1. Identify the causal mechanisms which account for the predicted relationships in the study;
2. Consider whether or not the proposed mechanisms are present in the empirical setting;
3. Test the causal effects, if the proposed relationships are confirmed by existing evidence;
4. Jointly evaluate the mechanisms and proposed theory if proceeding steps confirm theory and causal effects.

Compare these steps to the rigorous framework for testing EP theory outlined by Tooby and Cosmides (1992, cited in Patsiaouras and Fitchett, 2009). The analysis framework consists of the following:

1. Identify a reoccurring problem;
2. Consider environmental conditions that may have led to the adaptive function;
3. Specify the design features of the information-processing mechanism (this typically forms the hypothesis);
4. Describe how the adaptive function is performed;
5. Evaluate how the performed function, under the specified design, solves the problem identified in step 1.

It is in this proposed framework that evolutionary psychology research attempts to follow the social science paradigm of forming falsifiable hypotheses, and thus prevent weak theorising (Saad, 2008). By adapting a research methodology to one that more closely follows the critical realist design, evolutionary psychology can overcome the criticism that research in this discipline is not falsifiable. Both critical realism and evolutionary psychology converge in that both suggest utilising multiple methods to increase validity. Additionally, behaviour, even at the atomic level, is no longer believed to be strictly caused by any one factor, this has led to the realisation that behaviour is influenced by many forces, thus steering behavioural research towards the utilisation of multiple method research design (Rosenthal and Rosnow, 1991; Burell and Morgan, 1979). In light of the similarities between the research processes of critical realism and evolutionary psychology, the steps of the research process for this thesis will be discussed in line with extensive processes in evolutionary psychology. Figure 5.3 indicates the full research process within evolutionary psychology, where the logic may follow either deductive or inductive reasoning. The research process is discussed in this chapter as it sets a precedent for the arguments laid out in the sections that follow as to why the research for this thesis can be conducted qualitatively and combined with critical realism.

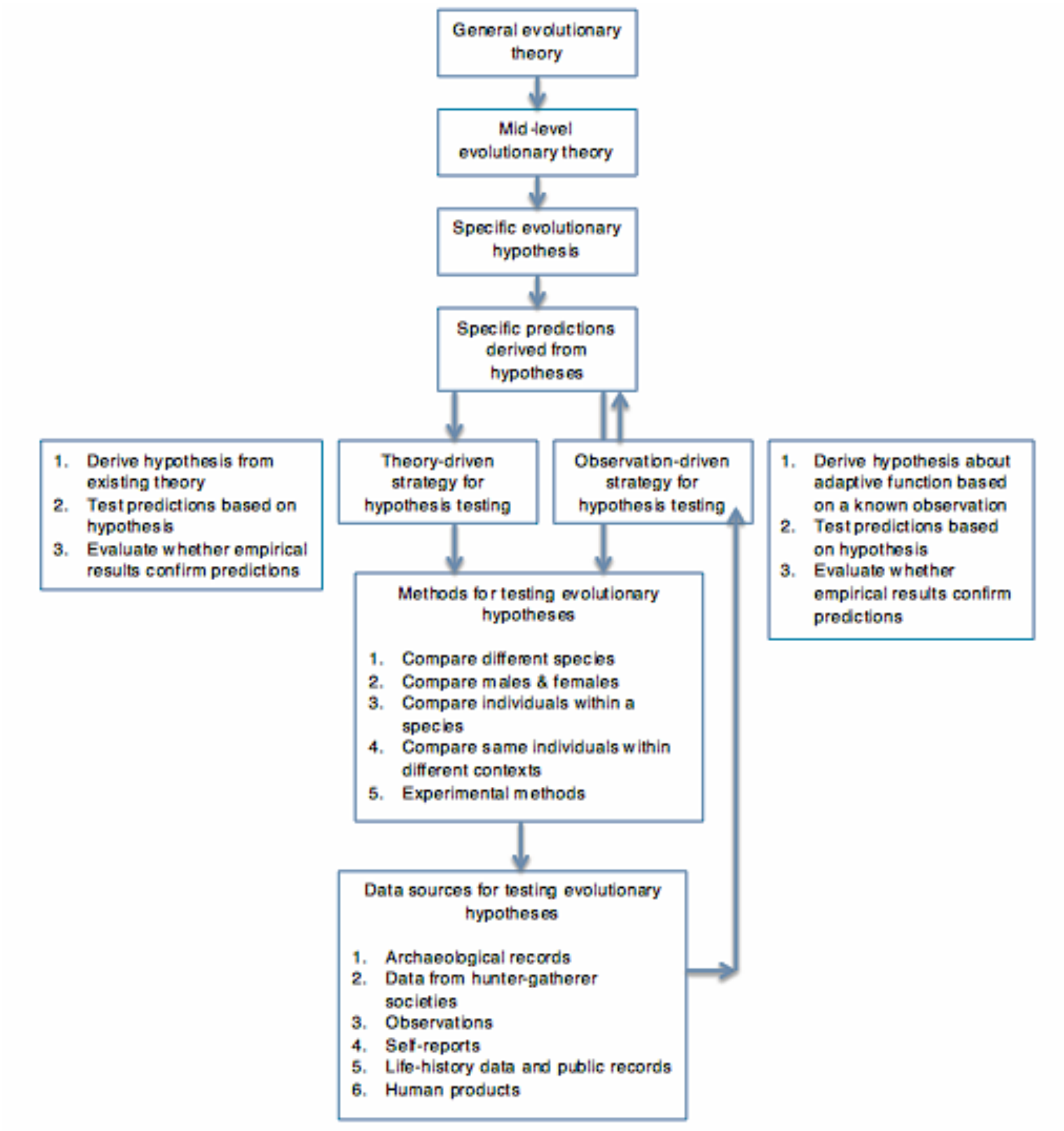

Figure 5.3: The research process in evolutionary psychology.
Source: Buss (2007)

5.3.1 Theory development in evolutionary psychology

The first step in the process considers theory development and contribution. Theory development in evolutionary psychology begins with general evolutionary theory. General evolutionary theory, the theory that evolution occurred through the process of natural selection, is largely accepted as valid because a competing theory has yet to prove it false (Buss, 2007). It is from this general and broad theory that mid-level evolutionary theories are derived (Simpson and Campbell, 2005; Buss, 2007). Often, these mid-level theories compete with each other due to the complexity of the psychological mechanism they aim to describe. Simpson and Campbell (2005) identify competing hypotheses under the theories of parental investment and reciprocal altruism. Each of these mid-level evolutionary theories make different predictions to explain when and why a male might invest resources in unrelated children of single women (Ibid.). It is from these mid-level theories that evolutionary psychologists make specific predictions for behaviour.

This research utilises mid-level evolutionary theories to understand competitive and copying behaviours under a larger strategy for status, which is underpinned by the universal desire for status. This in turn may be applied to pro-environmental behaviours, such as sustainable consumption, given the evidence within the literature that this type of consumption increases status, when it is visible to others and exhibits a high cost. In this case, the desire for relative status is considered an adaptive psychological solution to the problem of status, where the universal desire for status is an inheritable trait that helps to ensure both survival and reproduction (Saad, 2008; Griskevicius et al., 2012). The basis for most evolutionary theories consist largely of historical data and assumptions, which cannot be directly observed. The lack of direct observation contradicts the dominant model of research, which insists upon empirical evidence that can repeatedly confirm theoretical predictions, and results cannot be explained by other theories (Simpson and Campbell, 2005). Given that evolutionary theory is based on temporally distant assumptions makes it more difficult to defend the validity of empirical evolutionary-based studies, a primary criticism of the discipline (Simpson and Campbell, 2005).

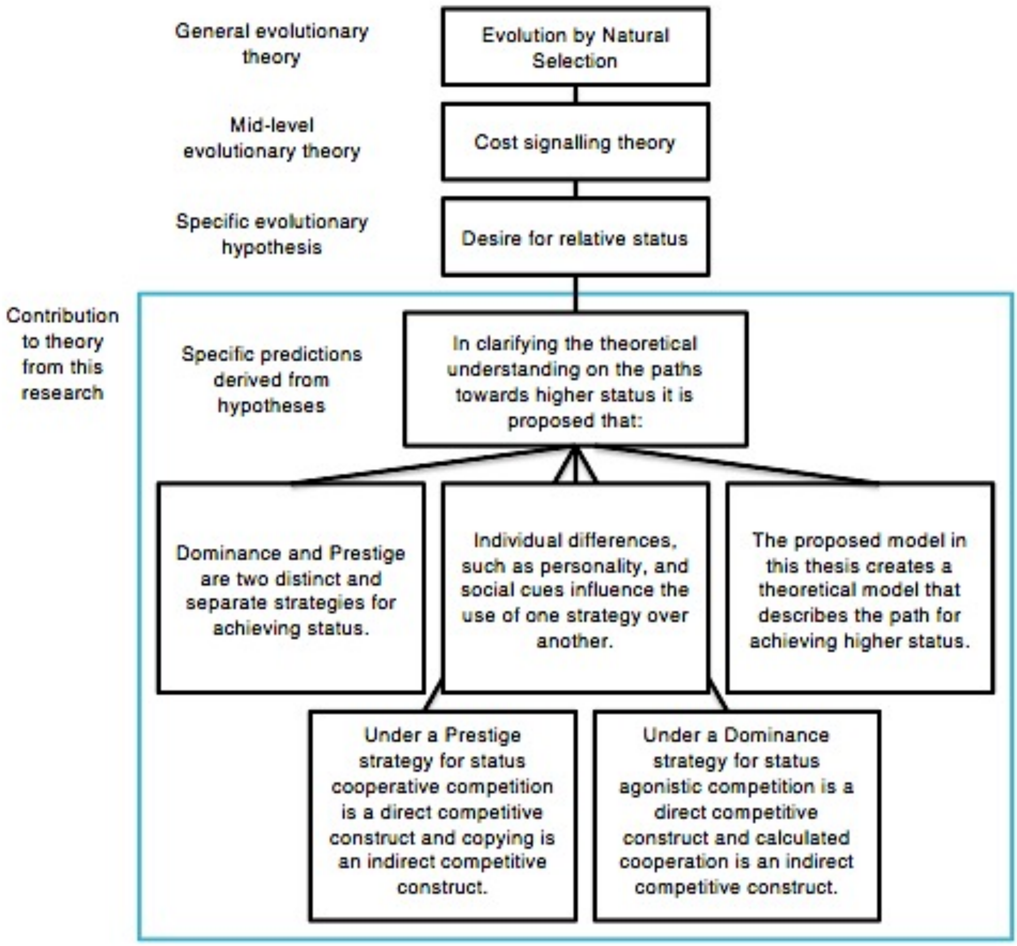

Figure 5.4: Theory development for this thesis.

This diagram demonstrates the levels of analysis in theory development according to evolutionary psychology and is derived from Buss (2007). It outlines the contribution to existing evolutionary theory that this research will provide, highlighted by the blue box.

For this research, theory contribution occurs as follows and is exhibited in Figure 5.5: starting from the general evolutionary theory of natural selection, this research is based on the mid-level theory of a universal desire for status (Saad, 2008). Moving one level further, this research makes predictions based on the specific evolutionary hypotheses that individual's utilise one of two strategies to achieve relative status within a social group, Dominance and Prestige. From this specific evolutionary hypothesis, predictions have been derived to better understand and predict strategy for status, where the process for achieving status does not necessarily result in the same type of status. In other words, an individual may compete for higher status under a

Dominance strategy; however, the result may be a Prestigious status. This research pushes current theory forward by clarifying when and how individuals seek relative status and how this influences behaviour. The contribution to existing theory is as follows: the netnography used for this research aims to clarify the paths for achieving higher pro-social status within a pro-environmental context because this method may provide a richer data set for analysing the path for achieving higher status. This includes further clarification on the two strategies for status identified within the literature, Dominance and Prestige.

5.3.2 Methodological paradigms in evolutionary psychology

After specific predictions based on evolutionary hypotheses have been determined, a top-down or bottom-up strategy must be decided. The top-down strategy follows the deductive logic, in that hypotheses to be tested are derived from existing theory. The bottom-up research strategy in evolutionary psychology is similar to inductive reasoning. Hypotheses are derived from a known observation and then tested against that observation (Buss, 2007). Critical realism, as shown in Table 5.1 typically adheres to deductive logic, and that is the logic this research adheres to for its strategy. Predictions are made from the existing evolutionary theory of cost signalling.

The next step in the research process is to determine the research methods for testing predictions. Simpson and Campbell (2005) describe eight high-level research methods developed for behavioural research. The system, originally created by Runkel and McGrath (1979, cited in Simpson and Campbell, 2005), consists of eight methods, which fall into four quadrants that are structured around two orthogonal axes (See Figure 5.4) (Simpson and Campbell, 2005). The axes refer to the degree in which a method is either obtrusive or unobtrusive and the degree to which the method adheres to either universal or particular behavioural systems (Simpson and Campbell, 2005).

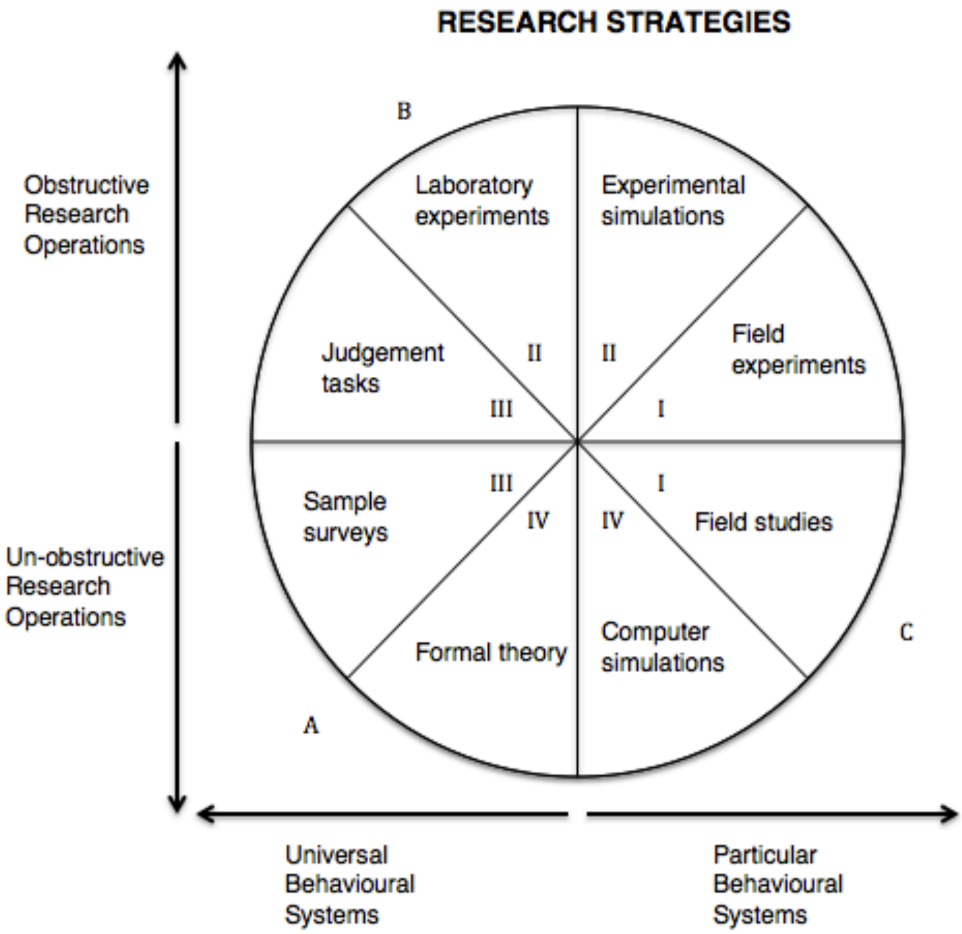

Figure 5.5: Guidance for research method strategies in evolutionary psychology. Source: Simpson and Campbell (2005).

5.3.4 Critical realism and ethnography

The final steps in the research process are to choose data collection method and data source, which in turn influences the data analysis. Evolutionary psychology and critical realism both primarily use quantitative sources of data, however, there is a precedent for combining methods for ensuring richer data collection. When considering a qualitative method, three main methodologies are discussed within the literature; grounded theory, phenomenology and ethnography. Grounded theory adheres more closely to an interpretivist ontology, where behaviour is goal oriented and evolves from social interactions that are highly symbolic (Goulding, 2005). This in itself does not comply with the evolutionary psychology perspective, which takes a more realist approach to understanding social interactions, as they relate to a series of adaptive functions. Furthermore, studies using grounded theory typically consist of unknown timelines for reaching theoretical saturation and studies are often criticised for being context specific, where theory development calls for generalisability (Goulding, 2005). Thus, using grounded theory would not be an appropriate approach for this research.

Phenomenology, another possible approach to qualitative research, may be considered either a philosophy or a methodology. The primary focus of phenomenology is on the conscious experience as opposed to subconscious motivation (Goulding, 2005). Thus, phenomenology would not combine well with the conceptual framework used in this research. Subconscious motivation is a central assumption to examining behaviour within evolutionary psychology, especially the desire for status. Phenomenology methods also seek to establish specific participants to sample prior to the study based on their life experiences to fully understand the conscious experience being explored. This delineates from the specific research goals of this thesis, which is to understand the subconscious motivation of hierarchy negotiation.

Lastly, ethnography grasps cultural meaning in consumption and behaviour, where it is not viewed as a socially constructed entity, but one that demonstrates greater meanings. It has been referred to as the armchair method, because field researchers were thought to have gone off to study 'alien worlds', sit back and write notes on what they observed from their armchair (Elliott and Jankel-Elliott, 2003; p. 215). According to Kozinets (2015; p. 65), ethnography is a considered a, 'cocktail of methodologies that share the assumption that personal engagement with the subject is the key to understanding a particular culture or social setting.' This perspective on ethnography has led to its increased use in marketing and management, because of the perceived cultural meanings associated with consumption (Pettigrew, 2000; Goulding, 2005; Kozinets, 2015). Within consumer research ethnography is thought to provide both an insider, or informant, and outsider, or researcher, view of a specific culture and the symbolism, or underlying meaning, embedded in the consumption practices or patterns within that culture (Scaraboto and Fischer, 2013).

This method of qualitative research compliments the evolutionary psychology perspective by describing the *how* as it fits in line with the *why*, thereby presenting a much fuller picture of causal mechanisms, a mutual goal in critical realism and evolutionary psychology. Analysis of ethnographic data aims to search for patterns in behaviour within a cultural context (Goulding, 2005). Ethnography relies upon an emic and etic form of analysis, which adheres to the theoretical and conceptual framework proposed. The emic of behavioural research refers to the study of behaviour from the view of the insider (Pettigrew, 2000); an etic analysis situates behavioural observations within the context of the broader concepts of culture (Thompson and Ustuner, 2015). Using ethnography for this research allows for an understanding of the larger picture, through observation from the outsider view or the etic, while interviews and questionnaires compliment this method by providing the emic or insider view (Boellstrof et al., 2012). In this instance, ethnography is chosen for its ability to provide rich, 'detailed descriptions of the field of study which are then used to generate theory' (Barron, 2013, p. 118). The theory generated by this thesis contributes to the incomplete theory on status.

Despite the ability to provide rich description of consumption practices, ethnography is not without its limitations. A central criticism of an ethnographic approach is that it is too emic-focused, and therefore subjective (Pettigrew, 2000). Ethnography is further limited by the perception that in-depth study of one particular group is not generalizable to wider contexts and therefore incapable of generating theory (Pettigrew, 2000; Goulding, 2005; Rees and Gatenbury, 2014). However, it is argued by Barron (2013) and Rees and Gatenbury (2014) that critical realism provides the ontological position that enables ethnography to linked to wider social structures and therefore move beyond subjective interpretations and narrow contextualisation. Lastly, a further limitation of ethnography is that it is a method, which 'cannot be taught' (Barron, 2013; p. 124). Ethnographic work is thought to emerge uniquely as a result of the relationship between researcher and participant. To produce a well-rounded and holistic view of a single culture or group, researchers employ a variety of data collection methods (Goulding, 2005). These methods often include surveys, observations where the researcher either actively participates in the culture being studied or observes without interacting, interview, video or audio recordings, photographs, informant diaries (Goulding, 2005; Kozinets, 2015). To adhere to critical realism and EP this thesis uses participant observation, photographs and interviews within an active online community of pro-environmentalists for data collection.

5.4 Internet mediated research

Within the literature it has been established that consumers are increasing not only their time online, but also making more consumption decisions online (Elliott and Jankel-Elliott, 2003). Examining behaviour online provides a much fuller picture of consumer decisions, providing evidence of what consumers are actually doing as opposed to what they say they would do (Elliott and Jankel-Elliott, 2003). Within an online community, individuals can achieve a sense of belonging and reaffirm their sense of identity, and the use of netnography, or online ethnography, allows researchers to explore this mechanism in an unobtrusive manner (Kozinets, 2002; Belk, 2013). A medium that provides useful validation of not only behavioural decisions but also the individual, is through the use of photographs (Belk, 2013). A popular social media site that focuses solely on photographs is Instagram, where individuals post photographs, apply artistic filters to them and peers provide comments and validation by 'liking' the photos. Individual communities may be set up through Instagram, where individuals can post certain types of photos to the group. A method that enables researchers to study behaviour in this type of environment is netnography.

5.4.1 Netnography

In accordance with existing ethical guidelines and the research process within EP, this research uses netnography for data collection. Netnography is defined as, participant-observational research based in online hanging-out, download, reflection and connection' (Kozinets, 2015, p. 67). Researchers whom use this type of method rely on online or mobile data sources to retrieve social information and acquire a rich understanding of a certain cultural or social experience. The crucial component to arriving at an understanding of a culture or social setting is thought to rely on personal engagement with the study subject or subjects (Kozinets, 2015). Kozinets (1999; 2002) made the case for marketers to gain insights on consumption from engaging with online communities – even back in the late 90's – before social media had the popularity and access it has today. In the late 90's people interacted with each other online via chat rooms or virtual communities (Kozinets, 2002). These communities allowed individuals to find other people with similar interests. Kozinets (1999) argued these communities provided marketers the opportunity to insert, defend, alter and reinforce brand meanings in these types of environments. It is because of our understanding of how consumers interact with each other and with brands online that brands can promote themselves on multiple levels (Muniz and O'Guinn, 2001). And while we can also gain an understanding by conducting surveys online, netnography gives us another level of insights and understanding.

Netnography applies the principles of ethnography to the online environment. Those principles include the use of a wide variety of methods in order to come to a deep understanding of a cultural or social experience (Kozinets, 2015). Originally developed as an anthropological method, ethnography has been used in sociology, marketing, management and other social sciences as well (Elliott and Jankel-Elliott, 2003). This method has been applied to marketing and management studies because of the cultural and symbolic meanings associated with consumption (Muniz and O'Guinn, 2001; Kozinets, 2002). Chapter 2 described the symbolic meanings associated with consumption compared to notions of the self and status (Belk, 1988; Chaudhuri and Majumday, 2006). The patterns of consumption were further explored in relation to culture in Section 3.3.5, which examined Schouten and McAlexander's (1995) ethnographic study of Harley Davidson owners.

According to Kozinets (2002; 2015) the steps for conducting a netnography start with developing the research question and choosing an appropriate field to study. The field in this sense refers to the online community or website and its members being observed as opposed to the traditional practice of fieldwork among distant cultures (Elliott and Jankel-Elliott, 2003). Once an appropriate field or community has been chosen to study, the researcher should follow the procedure listed below in Figure 5.5

Figure 5.6: The procedure of Netnography. Adapted from Kozinets (2015).

The main netnographic tools used for this research consist of participant observation, informal interaction, surveys and semi-structured interviews. The first phase will consist of intensive participant observation and informal interaction within the Litterati Instagram and Facebook pages. Participant observation and interaction with the informants was chosen as it helps build a rapport with the community members, it further ensures ethical research by fully disclosing the researchers intentions (Kozinets, 2002). Furthermore, ethnographic research is perceived to be complete when the researcher is able to describe the events from the insider perspective, actively participating in the activity or culture being studied allows for this, as opposed to non-participant observation (Goulding, 2005). Ingold (2014; p. 387) defines participant observation as 'doing from within'; the researcher actively participates in the group of study, and records the activities that are of interest. Non-participation may limit the insights developed by the researcher and prevent an emic description of the culture or group being studied.

Informal interactions include archival research of publicly available posts to ensure a full understanding of the nuances within the online culture, as well as help shape questions for the interview phase. Informal interactions further aid in building trust and a rapport between researcher and community members (Boellstroff et al., 2012). Data from the participant observation was collected by taking screenshots and notes in a research diary. Once collected, the data is coded for analysis. Coding is where synthesis of the data begins. This aspect of analysing the data through coding constructs categories of the data, which is then linked and compared to theory

(Goulding, 2005; Rees and Gatenbury, 2014). The data was coded for tactics, which demonstrate cost signalling, such as humour, artistic skill, time and pro-environmental behaviour. These coded tactics serve as the dependent variables of the study. Following the observation phase, a direct message was sent via Instagram requesting participation in a semi-structured interview. Analysis of the data collected link observed patterns and causal relationships to higher-level evolutionary theory, such as the universal desire to increase status and cost signalling theory. Summarised below are the research objectives, propositions to be supported by the data and methods of study.

Research Objective	**Proposition to be supported**	**Study Method**
Objective 1: To identify patterns which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members	Dominance and Prestige are the two distinct and separate strategies for achieving status.	Participant observation
Objective 2: To explore how people compete for higher status within an online community called the Litterati, a subculture of pro-environmental behaviourists	Agonistic competition and coercive cooperation are linked to Dominance. Cooperative competition and copying are linked to Prestige.	Participant observation Informal interactions Semi-structured interviews
Objective 3: To better understand the paths or routes people use to achieve social status within a hierarchy	Individual differences and environmental conditions influence status-driven behavioural decisions.	Participant observation Semi-structured interviews
Objective 4: To evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community.	Any tactic, such as humour, altruism or pro-social behaviour may be used for acquiring status, under either a Dominance strategy or Prestige strategy.	Observed interactions online and interview transcripts coded for humour, artistic talent and competitive constructs.
Objective 5: To discuss how a strategy for social status, competition and tactics can be	The proposed model may be used to explain and predict status-motivated behaviour.	Analyse the data against the concepts, theory and philosophical frameworks and

applied to the theory of the universal desire for status.		discuss the wider implications of the results.

Table 5.3: Summary of methods.

5.4.2 Data collection, saturation and analysis

Traditional field-based ethnographic studies typically occur over long periods of time, however, an advantage to doing online ethnography is that data saturation can be reached over much shorter periods of time, such as three to six months (Boellstroff, et al., 2012). Data saturation occurs when the researcher is able to predict behavioural outcomes based on his or her existing knowledge of the community. The themes for the qualitative data analysis are established *a priori* based on the constructs established from the literature review (summarised in Table 5.4), this is an acceptable practice within critical realism, compared to constructivism which would refuse to accept that observable patterns could be established prior to observation.

The analytical strategy incorporated visual analysis of photos collected during the participant observation and retroductive analysis of the interviews. In terms of the visual analysis, photos are examined for patterns according to the *a priori* themes. The themes are related to cost signalling theory, which relates to factors that are not easily replicable by others. This includes demonstration of time, photographic skill, humour and reciprocity. The visual analysis also revealed themes related to visible forms of competition and copying. However, keeping inline with theoretical sensitivity, analysis during data collection was kept open for any unanticipated patterns that may have developed. The overall analysis of the interviews was retroductive, 'where researchers take the descriptive account of the actors and re-describe them using available theoretical perspectives' (Morais, 2011, p. 70).

Table 5.4 summarises the stages of the fieldwork for this research. The participant observation was conducted for one year, starting in April of 2014 and continued throughout the data collection process. Analysis of the visual data began in November of 2014. This analysis continued for the duration of the participant observation. The long participant observation period enabled relationship building and trust between the community and myself. I began collecting and analysing images starting in

November of 2014. At the beginning of January 2015, I approached members to volunteer to be interviewed. Members were approached via direct message on Instagram, Twitter and the Litterati Facebook page.

Interviews were scheduled over the first two weeks of March 2015. After all the interviews were conducted, each interview was transcribed and then analysed. All data collection and analysis was completed by the end of May 2015.

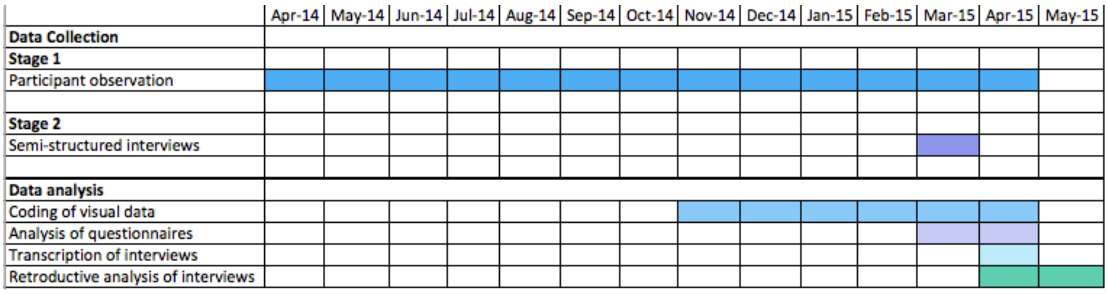

Table 5.4: Stages of fieldwork.

The remainder of this chapter will describe the methods undertaken for gathering data for this thesis and specific details of each phase, including the data analysis. The sections will follow the procedure outlined above and established by Kozinets (2015). The remainder of this chapter will be reflexive as well as descriptive to provide an accurate and precise account of the methods used.

5.5 The Field: The Litterati

The field selected for to collect data for this thesis is the Litterati. The Litterati is online Instagram community of pro-environmental behaviourists. Individuals become members by creating an Instagram photo of a piece of litter they pick up and attaching the hash tag Litterati (#litterati) to it. When a photo is uploaded to Instagram with the Litterati hash tag, the photo is also shared on the Litterati.org website. New members are welcomed by the main Litterati Instagram profile (shown in Image 5.1), typically run by the organisation’s founder Jeff Kirschner, as well as other highly active members.

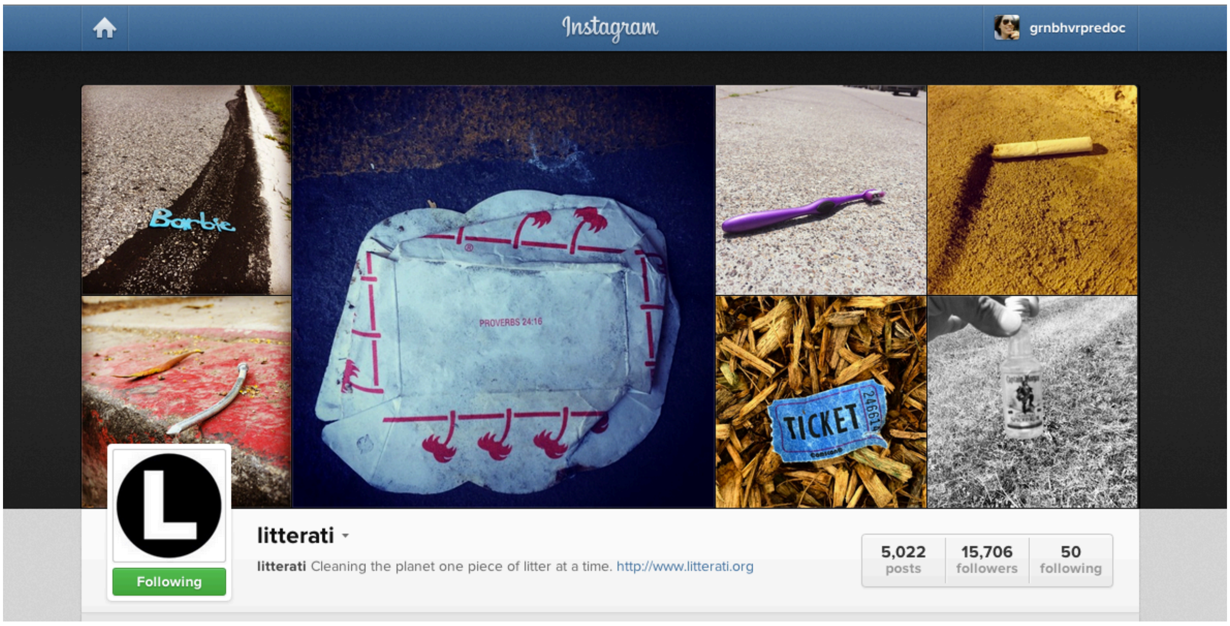

Image 5.1: A screenshot of the main Litterati Instagram Page.
Source: Instagram

The community consists of over 15,000 members. Most members reside in the United States, however as indicated on the map below in image 5.2, the community has members all over the world. The Litterati site is able to identify where members are located via geo-tagging and time-stamp information provided by Instagram. Members willingly provide location information by enabling the location function on the Instagram mobile application.

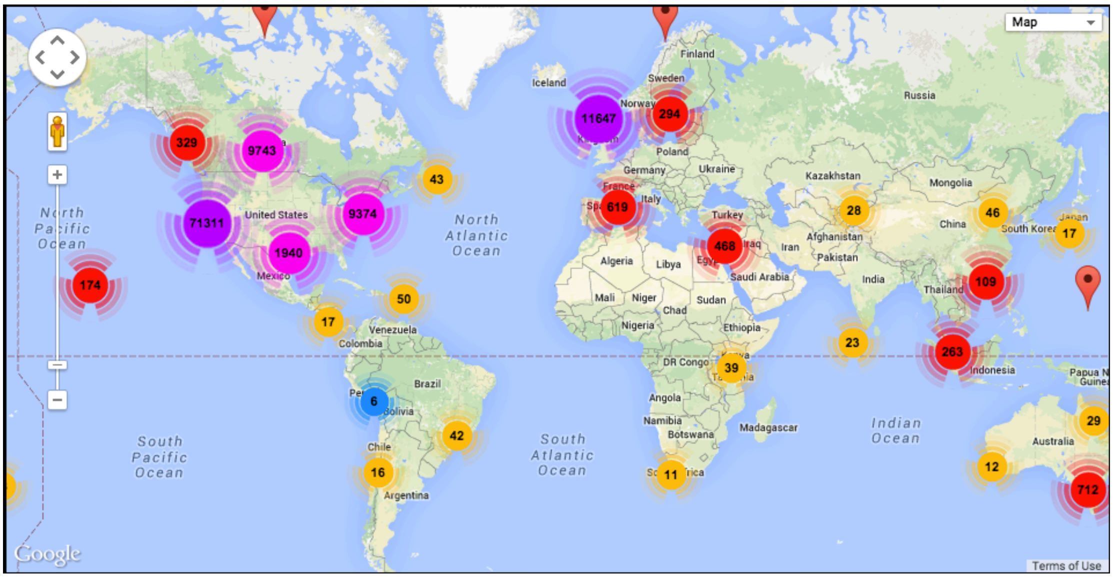

Image 5.2: A screenshot of the map showing where Litterati members have picked up litter.
Source: Litterati.org

5.5.1 Instagramming as practise

Smart phones allow us to create in new ways (Belk, 2013; Silva et al., 2014). One manifestation of this is the interaction people have with sharing photos and images about their lives (Belk, 2013). A popular social media network for doing this is Instagram. Instagram is a mobile and online application, which, allows people to create an account and quickly start taking photos, and sharing photos they take with their phones (Hochman and Schwartz, 2012). People connect with other people of similar interests through the use of hash tags, which link photos to particular topics, brands or causes, such as the Litterati. Beyond the opportunity to connect or interact, which contributes to one aspect of the analysis for this research, there is also the aspect of the photos themselves. It is useful to provide an account of the practice of documenting daily activities through Instagram and the tenets of visual analysis before reporting and discussing the actual data.

The data is composed of two components, the visual images collected during the participant observation and the semi-structured interviews conducting with Litterati members. From the sociological perspective and the Bourdiean perspective in regards to photocopy and status, photos are imitation of art, a replication of the life of the elite, that should only be relegated to a select few (Bourdieu, 1984). Photos according to Bourdieu represent the mundane, the average, a poor man's copy of what could be captured in paintings, accessible only by the elite class. If Bourdieu could see Instagram he would look even further down his nose at it than previously. Instagram brings photography and art to the masses. It captures images of everyday life (Belk, 2013). The images are not selected for special occasions; instead they capture any silly little thing anyone desires. Instagram from this point of view removes the art, the uniqueness from images.

Looking at photos and Instagraming as a social practice replaces that view of what photography is and what it represents. The images here represent a relationship between behaviour, materiality and performance of self, where underlying structures interact to produce the observable or empirical level events, within a stratified reality. Thus the Litterati provides a unique group for examining the performance of pro-environmental behaviour and the underlying structures, which encourage that performance.

5.5.2 Justification for choosing the Litterati

By photographing litter, or items discarded on the ground, individuals indicate in a highly visible way their ability (time, effort, and costs as reflected in cost signalling theory) to care for the environment. The photographs people post on Instagram act as a modern form of cost signalling, where each photograph posted signals that the individual has the time to photograph and pick up litter and has a mobile phone capable of taking photographs and uploading them to the internet. In addition to adding artistic filters, users typically attach a comment to the photograph, which typically attempts to evoke humour or wit, often satirising popular brand tag lines. Along with cost signalling, the site provides the four conditions to encourage competition as identified by Hardy and Van Vugt (2006). The behaviour is costly due to the time and mental effort, in the form of creativity, required to participate. Removing litter sends an honest signal about one's ability and resources to care for the environment and thus for other people (Griskevicius et al., 2010). Individuals who increase their effort to outperform the creativity and wit of others are rewarded with the long-term benefit of status and recognition among other users as demonstrated through comments, hearts and likes, as well as the distribution of the photograph among several social media platforms.

Image 5.3: Screenshot of commentary on a Litterati post on Instagram.
Source: Instagram

The visibility of pro-environmental behaviour provided by the Litterati and Instagram creates a useful medium to conduct behavioural studies on a larger audience within the real world. The site allows for the four conditions that encourage competition (costly behaviour, visibility, honest signalling and long-term benefit) utilising both the tactics of humour and pro-environmental behaviour. Applying netnographic techniques to this site will allow this research to fulfil the goals of both generalisability and realism, while gaining a deeper understanding of strategies for status and the tactics of humour and pro-environmental behaviour, as summarised in Table 5.3. This approach is less about the cause–effect relationship between strategy and status and more about understanding the nuisance tactics through which an individual may seek higher status within a social group. Thus contributing to the existing theory on status by clarifying the path to achieving it.

5.6 Stage 1: Participant observation

Participant observation is an integral step in conducting netnography and thus served as the primary phase for this research. Observation allows the researcher to gain an understanding of the underlying culture that may not be apparent to the users

(Kozinets, 2002). Insights gained through observation and informal interactions further help to frame interview questions (Boellstroff et al., 2012). Informal interactions during the participant observation phase allow the researcher to build up a rapport with community members.

5.6.1 Entry

My entry into the field occurred on 22 April 2014, which is known internationally as Earth Day. For my Instagram profile I chose an id that indicated I was a PhD student and in my profile I said I was doing research on the Litterati. The British Psychology Association has clear guidelines on the ethics of Internet mediated research, as identified in section 5.4. Given that Instagram is a public community and photos shared are all public there was minimal risk as far as ethics was concerned. I have also created a website about my research which I link to my profile so individuals that want to learn more about it or want to give feedback can contact me.

Image 5.4: Screenshot of my entry into the Litterati.

This established trust and increased interview participation, as well as helped to understand nuances within the community and interactions between members. Boellstroff et al. (2012) suggest spending at least 20 hours per week 'in world' as part of a comprehensive phase for understanding the nuances within an online culture. I was able to spend 20 hours per week by interacting with members and taking photos on my mobile phone. Over the course of the year I spent observing Litterati members, I followed 81 people in total. A list of the member id's I followed are listed in Appendix A. If I was not out taking photos, I was able to open the Instagram application and monitor the posts of other members at anytime. Interactions online were recorded by taking screenshots on my mobile phone, which are time stamped and dated. In addition to the screenshots, I made annotations and notes in a research diary on any observations made. All notes were organised by date and screenshot images were added to the notes. A complete list of all the research diary entry dates is presented in Appendix B. This method of data collection is often referred to as the 'two-boxing' approach. The two-boxing approach involves recording observations and taking notes on a device, such as a laptop, and engaging with the community via another device, in this case a mobile phone. To further enhance the richness of the data, archival research of posts were also explored. This allowed for better understanding of the underlying competitive constructs through evidence of users changing their tactics over time.

The specific steps for the initial phase are as follows:

1. Entry into the online community.
2. Participation in the Litterati photograph-posting activity.
3. Daily 'in-world' observation and note taking, totalling up to four hours per day, five days per week.
4. Collecting screenshots of interactions demonstrating humour, artistic skill, time, and other pro-environmental behaviours.
5. Engage users in informal interactions via comments on photographs, following accounts and liking photographs.

5.6.2 Data collection and Analysis

Rees and Gatenby (2014) suggest a useful practice when gathering ethnographic data is to create a data categories table, which aids in analysing the data. They adapt a framework from Spradley (1980, cited in Rees and Gatenbury, 2014) to use demonstrating useful categories for organisational studies. This has been adapted to suit the data gathered for this research. The categories reflect the physical surroundings, social surroundings, temporary perspective, task definition and mood.

Categories of data	**Subject-specific entities for status competition in Litterati**
Space and boundaries	Outdoors, online, mobile phone access and signal, possible tactic for status - exotic locales, across media sites Facebook, Twitter, Instagram
Actors	Identity reflected in the online id and avatar
Focus	Object or landscape
Language	Humour and wit, English, #'s, tactic for status
Time	Reflected in the number of posts per day, time of day when items are posted, tactic for status
Goals	'Pic of the week', 100th piece collected, 1000th piece collected
Relationships	Informal interactions between members, evidence of knowing each other beyond social media
Feelings	Competition, perceived self-efficacy, awareness, perceived status, morality, civic duty, fun
Symbols	Brands reflected in the items, consumption or anti-consumption

Table 5.5: Example of observational categories of data.
Source: Rees and Gatenbury (2014)

Lacey and Luff (2009) summarise the process for qualitative data analysis, however the same process is described by Goulding (2005); Kozinets (2015) and Rees and Gatenbury (2014):

- Familiarisation with the data through review, reading, listening, etc.
- Transcription of audio recorded material
- Organisation of data for easy retrieval and identification
- Anonymizing of sensitive data
- Coding
- Identification of themes
- Re-coding
- Development of provisional categories (established here *a priori*)

- Exploration of relationships between categories
- Refinement of themes and categories
- Development of theory and incorporation of pre-existing knowledge
- Write-up, including excerpts from original data to support interpretations.

In terms of the visual analysis, photos were examined for patterns according to themes established from the literature. The themes are related to cost signalling theory, which relates to factors that are not easily replicable by others. This includes demonstration of time, photographic skill, humour and reciprocity. Other visual analysis relates to visible forms of competition and copying. Visual analysis was conducted in Scrivener, a word processing application. I used Scrivener as opposed to NVivo for the visual data analysis because I was already familiar with the programme, the photos did not need to be converted to a different file format and I could code within each page as well as the page title as shown in Image 5.5. I was able to input screenshots into the application on a daily basis. After I would input images into the research diary I would write notes about what I observed while on Instagram and the comments between people. I would also analyse the images I captured that day, using the categories of data table as a guideline for what information should be included in my notes. In February of 2015 I began reviewing my notes and developed initial coding nodes for my notes. This consisted of labelling general phenomena. As I became familiar with my notes and observations I began to record my reflections on the data. An example of this is shown below in Image 5.5. I used the following coding scheme for coding the visual data and the accompanying notes.

> *Green indicates discussion-based idea/justification of theory – These sections typically included my thoughts or reflections on commentary or activity I observed that supported the a priori themes, for instance competition, cooperation, humour, time.*
>
> *Blue indicates a thought to help shape interview questions – Items highlighted in blue were thoughts or comments that I perceived to be helpful in shaping the interview questions. For instance, after I had become familiar with who the most active users were, I developed an interview question asking what community members the interviewee noticed more often, or whose photos did he or she admire the most.*

Yellow indicates interesting thoughts – Among my notes and observations there were ideas or themes that would be repeated. These themes were not developed a priori, for instance the idea that reciprocity was an important factor in maintaining recognition and attention within the community. Another example is when in a photo @plebeianjoe says picking up litter is no longer a 'daytime fight' gave a sense that the community members felt a sense of activism in their activity.

Pink indicates evidence that supports the model/framework – Thoughts highlighted in pink indicated observed events or comments that supported the conceptual framework and model discussed in Chapter 4. For instance, I had noticed @plebeianjoe was copying the style of @fredmurs and @thewhiskeydude and wrote about it in the research diary. When I went back and read my notes I then highlighted this observation in pink.

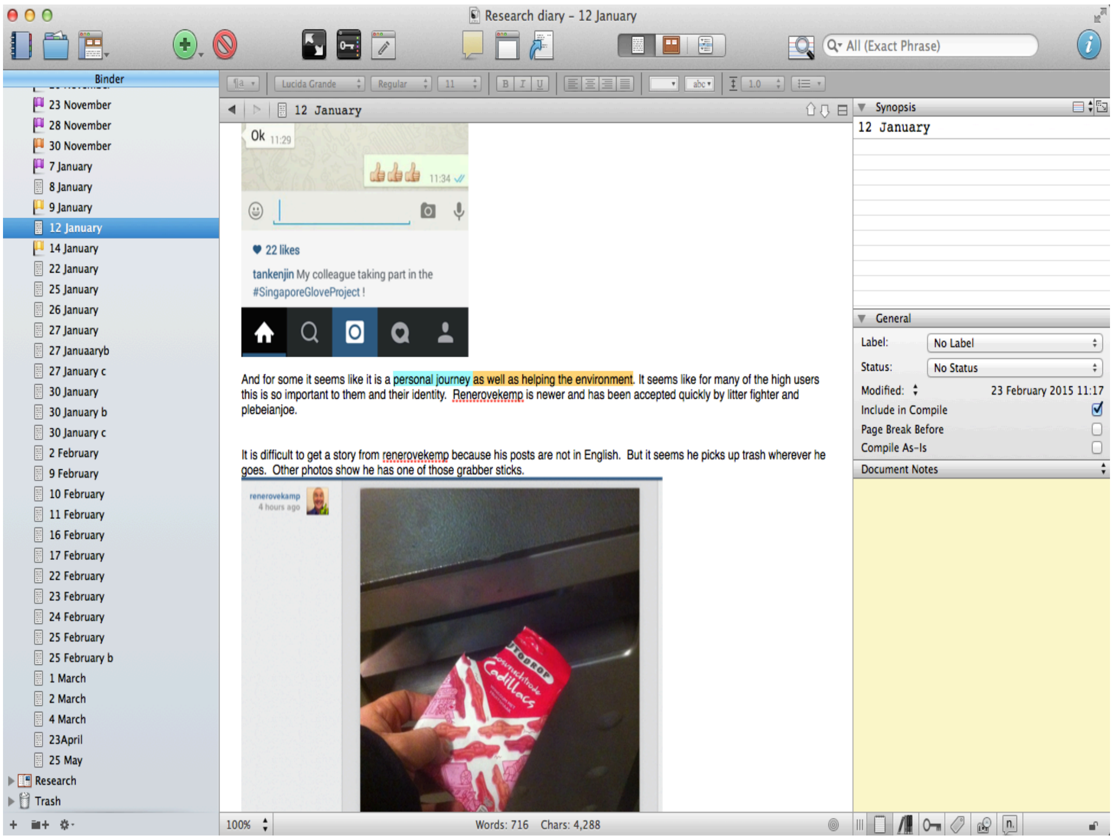

Image 5.5: Screenshot of research diary including visual analysis of images and notes.

I reviewed my notes a second time to begin highlighting observations according to the coding nodes described above. I then reviewed my notes a third time to check and refine the data and observations. Lastly, I returned to the field to refine my understanding of patterns/themes used for coding. After the coding was conducted I developed summaries of data from this participant observation phase to construct theory from findings, which is found within the next chapter where results are discussion are combined. In total I observed the online behaviour and interacted with 81 Litterati members. A full list of the member id's and demographic information is listed in Appendix A.

5.6.3 Ensuring trustworthy interpretation

In the instance of qualitative research the data collected is based on observations and researcher interpretation, where the researcher is part of the world he or she is observing (Kozinets, 2002; Goulding, 2005; Armstrong, 2008). Adopting this method within the research design adheres to the critical realist perspective in that the world is observable, however, the knowledge obtained in describing the world is subjective. Thus it is important to discuss the personal or subjective knowledge of this researcher, as this may have a significant effect on the results and observations reported in the following chapters of this work.

I find the evolutionary psychology conceptual framework appealing due to its use of biology to help explain and understand behaviour. I understand and accept that it may be able to explain all behaviour as it manifests itself differently across cultures; however, I accept that underneath these manifestations there are more universal explanations of behaviour. It is this assumption that may lead me to interpret certain observed behaviours in a less objective manner, however being aware of this bias assists in overcoming this bias (Elliott et al., 1999). Using software, such as NVivo, has been shown to aid in contextualising qualitative data and may help to minimise observer bias (Kozinets, 2002).

5.6.4 Conducting ethical research

The British Psychological Society (2013) broadly defines Internet mediated research as research, which utilises the Internet and similar technologies to acquire quantitative or qualitative data from or about human participants. Given the lack of face-to-face interaction between participant and experimenter, Internet mediated research presents unique ethical challenges regarding privacy and consent, given that the definition of what is private and public on the Internet is often unclear. The British Psychological Society (2013) presents four guiding principles in approaching internet-based research. These four principles include: 'respect for autonomy and dignity of persons, scientific value, social responsibility and maximising benefits and minimising harm' (The British Psychological Society, 2013, p. 2). The internet sites utilised for this research, associated with Litterati.org are all open forums and groups, in that there is a certain level of understanding that information provided by these types of sites is not private. In this instance informed consent is not critical from an ethical standpoint, however, all personal data obtained will be kept confidential (The British Psychological Society, 2013).

Further, regarding the ethics of online research, one must consider the lack of control when collecting data online and existing social structure (The British Psychological Society, 2013). This research is aware of this issue and is utilising the Internet to obtain qualitative data on pro-environmental behaviours and status strategies, which is less stringent on controlled conditions necessary for behavioural experiments. One must also be cautious of avoiding disrupting existing social structures and interactions when conducting research online. As advised by ethnographic techniques, this is overcome by entering the group and gaining acceptance, where observations can be made as an insider, therefore reducing the impact on existing social structures.

5.6.5 Provide opportunities for member feedback

Members were provided the opportunity to give feedback either by directly contacting me on Instagram or through my university email address. Members that volunteered to be interviewed were given the opportunity to ask questions about my research and learn more about the type of research I was conducting and the implications for it.

5.7 Stage 2: Interviews

The second phase of the study consisted of 13 semi-structured interviews, thus allowing for free flow of information within the interview. This form of interviewing enables the researcher to learn more, where structured interviews contain too much pressure to seek certain answers (Rosenthal and Rosnow, 1991; Boellstroff et al., 2012). However, Rosenthal and Rosnow (1991) indicate that an analysis of interview methods suggested when conducting research on non-threatening topics, neither form of interviewing was found to be more effective than the other. Open or semi-structured interviews often are more useful when the researcher is looking for 'nuances of meaning', which are not often revealed in structured interviews (Ibid, p. 180).

When developing a semi-structured interview it is suggested that the researcher begins the with a list of 6 to 10 questions, then adds follow up questions throughout the interview. I began each interview with a greeting and general icebreaker, such as, 'how are you today?' and 'do you have any questions for me?' Next I would ask each interviewee a little bit about themselves, such as what they do for a living and how they got involved in Litterati. This would be followed up with a question regarding what initially attracted them to get involved with Litterati, as well as what they like about participating in it and in any other members or photos stood out. I further enquired about whether or not the interviewee had a history of similar behaviours or engagement with other environmental groups or social media. With many of the sessions this led into further discussion on how the interviewee behaviour has changed since becoming actively involved in Litterati and how it might shape future behaviour. Most of the interviewees would also discuss the perceived opinions other people (non-Litterati members) have on this behaviour, particularly strangers observing the photographing and picking up litter. The interviewees concluded with me showing gratitude for their participation and inquiring if there were any questions or feedback for me. The discussion guide used during the interviews is presented in Appendix C. A list of the interviewees, including their Instagram id, approximate age and location is provided in Appendix D.

5.7.1 Limitations and barriers to the interviews

The interview sessions lasted approximately 30 – 45 minutes and were conducted over Skype. Interviewees provided verbal consent to be recorded and the conversations were recorded within Microsoft Word. Using Skype allowed for a flexible, low-cost and efficient way to communicate with interviewees. Most of the interview participants were in the US, therefore time zones were the biggest barrier to scheduling the interviews. Further limitations exist due to technological difficulties; since most interviews were conducted over Skype a reliable Internet connection was needed for both parties to successfully complete the interview. Initially, the first interviews were attempted with the video feature of Skype, however this resulted in multiple dropped calls. This was experienced with Elaine, Joe and Fred. Skype was found to be more effective when conducted without the video feature, therefore the remaining ten interviews only used the call feature available through Skype. Although interviews are perceived to enrich observational data (Elliot and Jankel-Elliott, 2003), it is difficult to anticipate interviewee reactions thus varying the questions from interview to interview (Ponterotto, 2013).

Lastly, conducting interviews over telephone, or the Skype telephone feature may inhibit building a rapport with interviewees compared to a face-to-face interview (Rosenthal and Rosnow, 1991). This may lead to shorter interview times and less opportunity for probing questions. Due to scheduling conflicts, two interviewees provided responses to the discussion guide via email. The recorded sessions were transcribed in NVivo.

5.7.2 Analysis and coding

The interviews were analysed retroductively, 'where researchers take the descriptive account of the actors and re-describe them using available theoretical perspectives' (Morais, 2011). These theoretical perspectives include cost signalling theory and the universal desire for status. I reviewed the transcripts four times. The first time was to become familiar with text. The second time I reviewed the transcripts I conducted open coding (Ponterotto, 2013). This open coding was used to highlight words or sentences that had potential meaning. For instance, when conducting the open coding for Fred's interview, he mentioned the word community, which I then highlighted. Next, I conducted axial coding in order to create common categories found among the all the interviews (Ibid.). This process of coding relates concepts and categories to each other where the coding constructs are controlled or pre-determined. Each code is developed by relating concepts to one core theme and compared to the dynamic relationships that are found among theme (Goulding, 2005). I further compared these categories to categories established during the visual analysis; this included the creation of nodes for the following themes:

Humour
Reciprocity
Competition cooperation
Calculated cooperation
Agonistic competition
Copying
Activism
Brands
Higher effort behaviours
Self-efficacy
Interesting thought

NVivo does not allow for colour coding of words or sections, however a highlighted portion or word could be connected to a node. In the screenshot shown in Image 5.6, a portion of an interview with Leigh Anne is highlighted. She is describing how her participation in the Litterati has influenced her consumption behaviours. She discusses making her own bath products to reduce the amount of plastic packaging she consumes. This section was connected with the node category of 'higher effort behaviours' as is described an activity beyond litter abatement.

The final coding phase consisted of selective coding, which examines potential relationships between previously coded items to build a meaningful story and contribution to theory (Kozinets, 2002; Ponterotto, 2013). I applied additional coding to the same section of text as these higher effort behaviours also appeared to present a link to a Prestige strategy for status. This assertion was based on the evidence in the literature that higher effort pro-environmental behaviours are perceived to increase status (Griskevicius et al., 2010; Zabkar and Hosta, 2013) and that PEBs are altruistically motived (Stern, 2000), thus Prestige-driven.

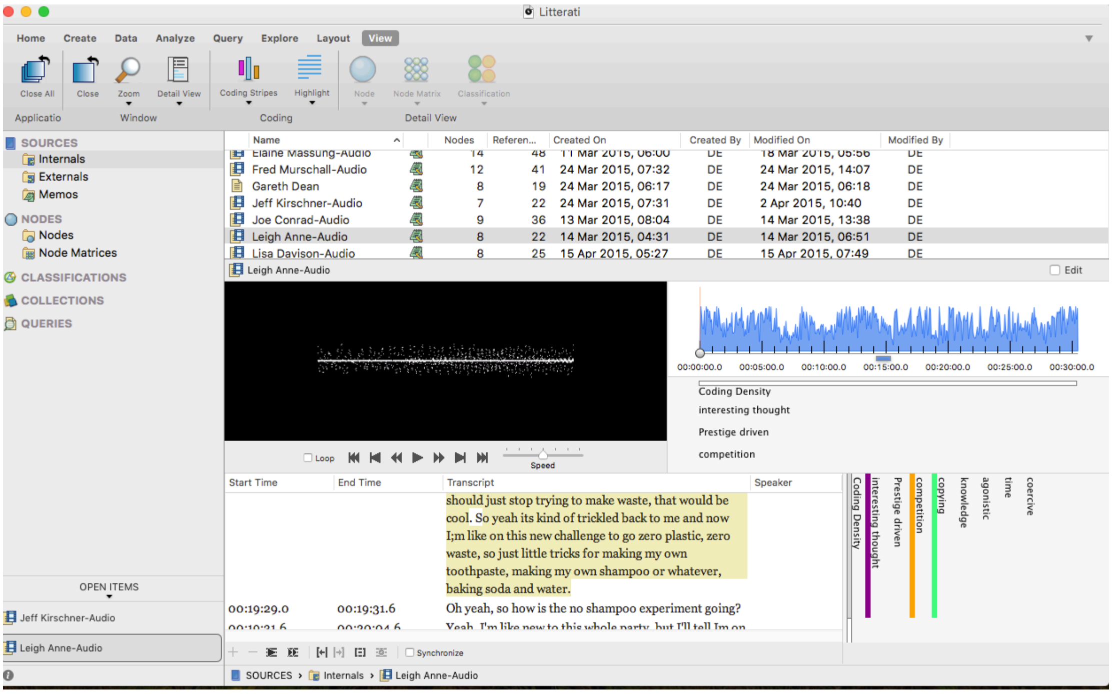

Image 5.6: Screenshot of retroductive analysis and coding of interview transcripts in NVivo.

Upon the final review of the interview transcripts and the visual data I felt I had enough data to support my research objectives and my research propositions.

5.8 Reflections on immersion

Schouten and McAlexander (1995, p. 46) discuss the issue if ‘going native’ or immersion while conducting their ethnographic work on Harley Davidson owners. When conducting ethnography, there is a potential risk of the researcher getting too close to the phenomenon he or she is studying, such that they can no longer maintain critical, scholarly perspective. To overcome the potential risk of getting too close Martin and Schouten employ two methods. The first is critical self-examination. The second relies on the partnership between the two authors to monitor each other for signs of narrow viewpoints.

Barron (2013) relies on critical reflection via auto-ethnography during his research to maintain objectivity. He discusses the removal of much of his own emotional reflections from his thesis to avoid any risk in critical examination from external critics. Barron (2013) argues providing too much reflection in a doctoral thesis is risky in that it tends to reveal the ‘clumsiness’ (p. 124) of research. Doing ethnography is clumsy and is a method that cannot be taught. It is through reflection and analysis that a research can begin to 'see' a narrative take shape. This is where the criticism of ethnographic methods begins to emerge. Presenting our own thoughts and experiences lends itself to the argument that we are telling just-so stories. In studying behaviour online the critique is even greater in that netnographers only see a snapshot of behaviour, where identity is hidden and generalizations are impossible to achieve (Kozinets, 2002). However, as discussed previously, triangulation helps overcome this.

My own experience doing netnography is similar to those discussed in some of the more well known ethnographic works (Schouten and McAlexander, 1995; Kozinets, 2002a; Kozinets, 2002b; Barron, 2013; Coskuner-Balli and Thompson, 2013). In examining the Litterati I relied on self-reflection and discussions with colleagues as well as my supervisors. I presented my work at 4 conferences during my final stages of analysis and write up. Those opportunities to discuss my work with colleagues from around the world helped in widening my viewpoint, as well as reflecting on my conclusions. Although I did not always have my laptop with me to add my reflective thoughts to my research journal, I always carried a notebook with me to write reflections down on my research. I further sent myself electronic notes from my phone to add to my research diary later. This reflection would most often occur prior to or after my meetings with my supervisors in which I would have to critically discuss my progress.

Although a researcher must be cautious to keep distance between themselves and the group they are studying it was my participation in the Litterati that helped me understand the minutiae of a community. As a 'lurker' (Kozinets, 2002a, p. 65) I needed to identify and understand the hidden meanings or symbols behind the visible activity. That could only be achieved through participation in the activity as the other Litterati members did. Once I had become familiar with the community and understood how it worked I become more enthusiastic about my research. My excitement for the community reflected the excitement community members felt for the Litterati.

5.9 Summary of methods

This chapter discussed the philosophical underpinnings of this thesis. It further provided justification for the research strategy used as well as provided the specific details of the data collection and source. Theory development within evolutionary psychology was discussed within the context of the critical realist research process. This research adopts a critical realist perspective in order to help mediate the proximate and ultimate views on behaviour, thus helping to build upon a universal framework which evolutionary psychology seeks to create. This research aims to contribute to further specific evolutionary theories on status and the strategy for achieving status within a peer group. In order to gain a deeper understanding of tactics used for status this research will utilise netnography to gain a broader understanding of behavioural decisions in the real world. The chapters that will follow will examine and discuss the results from this research in accordance with the research objectives.

Chapter 6: Findings and discussion of prevailing themes

The aims of this chapter are:

- To provide the macro-level findings of the netnography and interviews.
- To discuss the prevailing themes that arose from the data.
- To provide evidence that what seems to be a single phenomenon is in reality composed of assorted heterogeneous elements.

This chapter presents the research findings at the macro-level, or larger, overall story of the Litterati community, solely discussing the qualitative data obtained through participant observation and interviews. The prevailing themes and patterns that emerged from the netnography are applied to existing theories at the proximal and ultimate levels. The themes and patterns discussed respond in part to Research objective 1, which is:

To identify patterns which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members.

These themes will be discussed against displays of Dominance or Prestige in the next chapter. The patterns and themes emerge out of a much larger view of the community as a whole and therefore it is much clearer to present as a macro-level story, which then sets the stage for the next chapter discussing the micro-level aspects of the data, where the quantitative data and qualitative data will be discussed in greater detail.

The critical realist ethnographic method requires an explanation of the events observed, not just a description of them (Rees and Gatenbury, 2014). Rees and Gatenbury (2014; p. 6) quote Sayer (1992; p. 112) stating that the explanation presented within critical realism comprises steady progression from '*actions* through *reasons* to *rules* and thence to *structures'*. Thus, the findings of this research are combined with the discussion to adhere to the critical realist method. Combining the findings and discussion is an accepted method for presenting qualitative work and is consistent with existing published ethnographic work (Burnard et al., 2008; Schouten and McAlexander, 1995; Fussell and Stollery, 2012). To establish context the presented work begins with the macro story of the Litterati and its founder.

The prevailing themes that shape or formulate the '*reasons* to *rules',* inferred from interviewee accounts, are reported and discussed in terms of proximal theory within marketing, such as community socialisation, co-creation of identity and self-efficacy. Discussion of these themes is then extended to theories in evolutionary psychology to present the '*structures'* to explain the causal powers of the observed events.

Field notes:
Before entering the Litterati I first found out about the organisation through a story on the social media site Upworthy.com. The story links you to a video of Jeff, the founder of Litterati, telling the story of Litterati. The story is very similar to the one Jeff tells me in our interview. At the beginning of our interview I relay to him that I know the story but ask if he could tell it to me again. As the interview continues, Jeff tells me how important the work I am doing is. Just as he thanks new Litterati members, he thanks me for everything I am doing, including spreading the Litterati story. He finds ways to specifically motivate the individuals he speaks to and elevate their own perceptions of themselves. It seems as though Jeff is able to make each person feel unique, special and important, consistent with the charismatic leadership theory.

6.1 The story of Litterati

To tell the story of Litterati you need to tell the story of Jeff. Based upon my own discussions with Jeff, and supported by comments from interviewees, Jeff is a charismatic person. He possess the ability to draw you in with a great story and with that story he convinces you that by participating in the Litterati you are making a significant impact towards saving the planet. The Litterati needs you; you are an important part of its overall mission. According to the website, Litterati.org, 'By combining technology, social awareness and art, the Litterati is tackling this ever escalating problem [of the impact of litter] one piece of litter at a time.'

Litterati began with a simple story; one that most members know by heart. The story begins with Jeff and his family hiking near their home in Oakland, California. And with many great tales, the idea was sparked by the innocent words of a child – Jeff's four-year-old daughter. While the family was hiking, Jeff's daughter noticed a tub of cat litter sitting along the creek bed. She points to it and says, ‘Daddy, that doesn’t go there.’ Jeff replied, ‘You’re right, it doesn’t.’ In his own words, that exchange ‘sparked’ something. Later, he took a few photographs with his phone of cigarette butts on the ground using Instagram, simply because the app was right there on his home screen. People liked the photographs and began to post similar ones. Jeff thought that if people could do this on a regular basis, it could make a positive impact on the environment. To him, according to the story he tells, it is through this activity that the problem of litter is ‘approachable’. He thought of a hash tag, told people about it and from that, Litterati took off. Now, Jeff is constantly on the move, speaking at events across the country, doing interviews, and finding new ways to make a bigger impact on the planet with Litterati.

6.1.1 Charismatic leadership and community: the power of Jeff

Although the focus of this research is on strategies for status, one theme, which arose from the data, was the impact Jeff has on the entire Litterati community. From the EP perspective he is a high status model to be feared, copied and deferred to within a smaller group of peers (Henrich and Gil-White, 2001). However, through social media he is able to widen his reach and effectively engage users all over the world by creating a community. The impact Jeff has on the community and its members, as evinced by their reflections upon their interactions with him, indicates the need to analyse the leader of this online community.

Jeff conveys a charismatic type of leadership, which adheres to the classic theory, established by Weber in 1947, stating that a charismatic person is one who is, ‘an extraordinary quality of a person, that evokes a devout following due to supernatural, superhuman, or at least specifically exceptional powers or qualities’ (Bligh and Robinson, 2010, p. 845). Jeff is able to create a story about Litterati that draws people in. An example of this is from a social media story on the website Upworthy.com shared through Facebook that tells the story of how Jeff started the Litterati. That story caught my attention and helped me learn about the Litterati, several interviewees reiterated this as well[2].

[2] Discussion of the Litterati story and how it began is repeated in this section to punctuate the repetition of the story as told not only by Jeff, but also by other interviewees. The story is told the

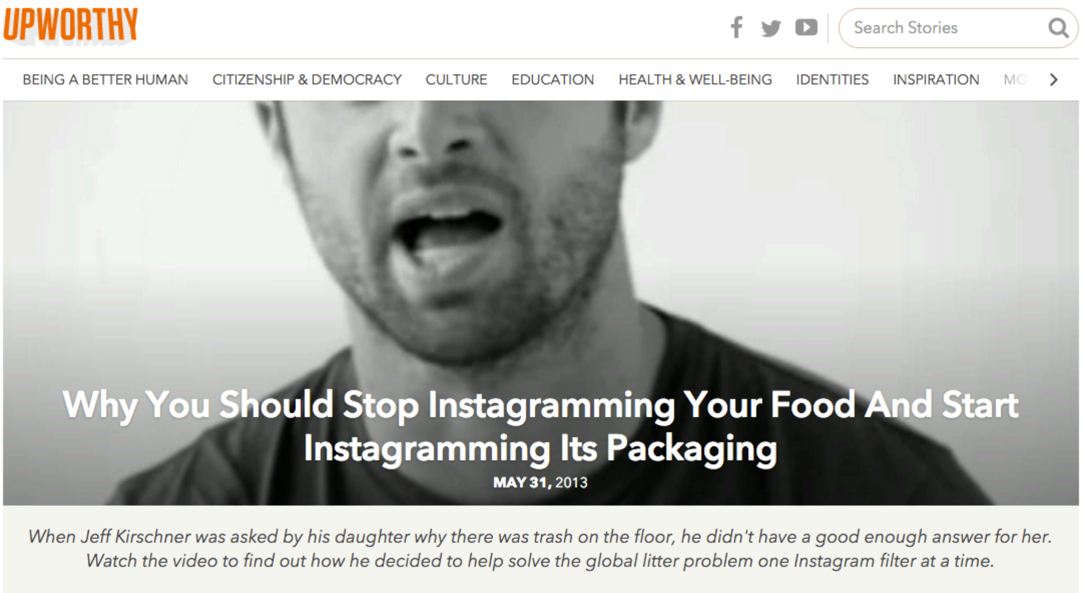

Image 6.1: Screenshot from Upworthy.com on the story about Litterati.

For many of the study participants it was their first interaction with Jeff that motivated them to join the Litterati.

Joe (plebeianjoe):

> He's a great a guy! He is completely genuine and a good listener and he's got it all. He's got a good brand, he's got good salesmanship, Um and he's honest and he's doing it for the right reasons.

Joe, and several other interviewees who have met Jeff, describe him with the same sentiments. It is based on these descriptions from interviewees that Jeff appears to embody the characteristics of a charismatic leader as identified by Weber (1947, cited in Bligh and Robinson, 2010), beyond my own initial observations from my interactions with him. For other interviewees, such as David (*ullafayetteservice*), Nate (*swlrp*), Fred (*fredmurs*), and myself, who have had direct contact with Jeff, it is apparent that because of who he is and the story he has to share, this entices people to join the Litterati.

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same way, over and over again, in presentations, on social media, and articles. Interviewees know it and can repeat it almost as if they lived the same story.

In their analysis on charismatic leadership and social change, Seyranian and Bligh (2008) describe the characteristics of a charismatic leader, who evokes social change, based on Weber's charismatic leadership theory (1946, cited in Seyranian and Bligh, 2008). They state that a charismatic leader is able to evoke social change by motivating and inspiring others to support his or her vision. This vision often appeals to people's emotions and also boosts their perceived self-value. Jeff does this consistently. Several interviewees described feelings as though they were a part of an important cause and community. The two interview excerpts below serve as evidence to this point. Nate describes his entrance to the Litterati as providing an instant feeling of community, which he found to be 'amazing'. Nate, according to his interview, was initially inspired to take part in the Litterati after seeing Jeff give a presentation. After the presentation Nate introduced himself to Jeff and despite having a lack of interest in using Instagram, he was quickly persuaded to try it out. For Nate, the experience was a positive one, where he feels like a member of a community and sees the value in Litterati as an educational tool.

Nate (slwrp):

> I just remember ah, you know the first Litterati picture I posted, you know later that day there was a welcome from Litterati. Welcome to the Litterati, the planet thanks you and something really specific about the thing I picked up. I'm like, oh my god, that's amazing! Somebody's actually paying attention, uh, so kind of immediately felt like a community.

Gareth (gd4561a):

> I guess it gives a sense of empowerment, little changes by a lot of people add up. I think it was something that "gave me permission" to go out and just pick litter on my own.

Both excerpts from Gareth and Nate indicate Jeff's (*Litterati*) ability to make people feel valuable. Whether that is through the feeling of being part of a community or providing empowerment to make a change for society. It is not just the story Jeff tells, or the way he tells it, but it is how he makes each member feel that contributes to the success of the cause.

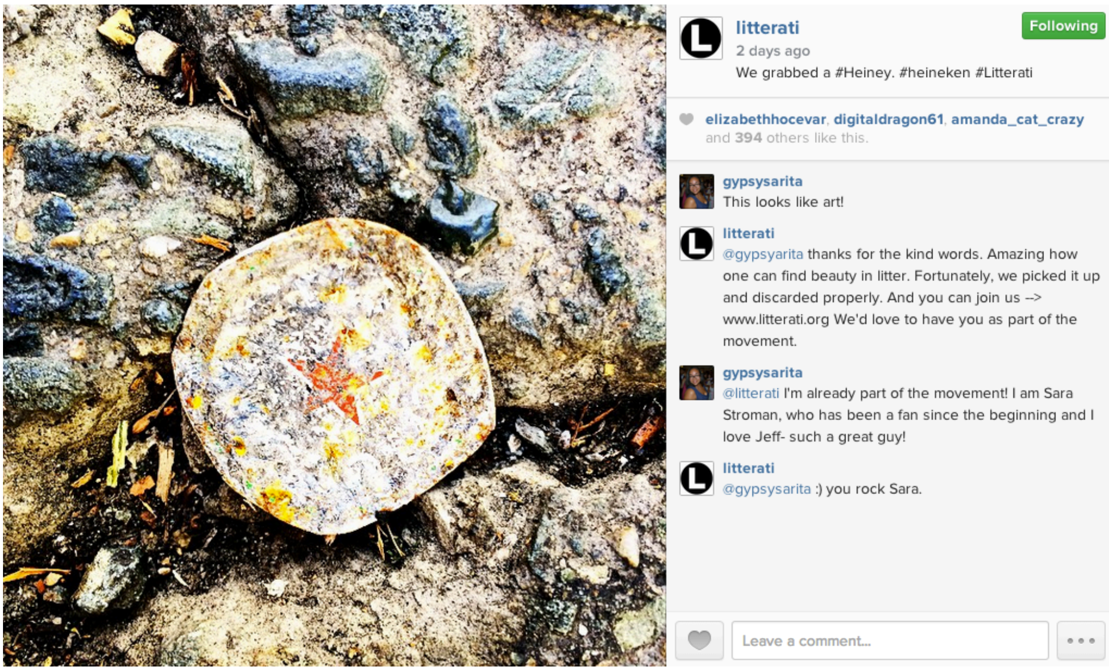


Image 6.2: Image demonstrating the welcome message by Jeff.

6.1.2 The call to action

Further evidence of Jeff's actions is found in Image 6.3 below. As Nate described, after posting his first picture he received validation, recognition and gratitude rather quickly. It is the immediacy the recognition that appears to stand out among member experiences. The image below shows how this happens. Leigh Anne (3moonsstudio) posted her first photo and received validation, recognition and gratitude from Jeff (Litterati). In the exchange between Leigh Anne and Jeff, Leigh Anne indicates excitement for the recognition with the use of exclamation points and states she will continue to engage in the practice of Litterati in the coming months.

Image 6.3: Screenshot of Leigh Anne's (*3moonsstudio*) first Litterati photo.

In her interview, Leigh Anne describes her first interaction with Jeff as a way of 'sucking you in' Again it is the immediate connection with the new user, which appears to engage new members and motivate them to continue to help the cause. The acknowledgement she receives from Jeff and others through liking validates her behaviour, increasing her perceived self-value.

Jeff's ability to engage people to fulfil his vision is an important component to the success of Litterati. His interaction with Litterati members 'empowers' them, 'sucks' them in and 'immediately' introduces a community feeling. It has been suggested this type of leadership increases perceived self-value among followers and therefore increase an individual's subjective social status (SSS), which has been shown to be connected to an individual's sense of self (Destin et al., 2012). Destin et al. (2012) further argue that increasing these feelings of subjective social status and sense of self influences motivation and personal goals. An alternative explanation to engagement in Litterati is presented by the motivational theory of charismatic leadership (Shamir et al., 1993). According to the self-concept-based motivational theory of charismatic leadership (Shamir et al., 1993), effective charismatic leaders are able to get followers to engage in social change behaviours by connecting the core concepts of the 'vision' with the core of values and identities of the followers

(Bligh and Robinson, 2010). Jeff shares his vision repeatedly, through social media. He is able to build the Litterati up as a brand, and not just a cause, which appeals to members' environmental and creative goals. This is consistent with branding principles as described by Roper and Parker (2006). Branding principles not only reflect the signs and symbols associated with communication between the organisation and its consumers, but also the structuralization of social interactions (Muniz and O'Guinn, 2001). Followers are 'called to action' through the goal of an idealistic future (Seyranian and Bligh, 2008). Jeff's idealistic future is a litter free one, as shown by the brand's tagline in image 6.3 below. It is through this vision, brand and leadership that Jeff is able to create a brand community. The Litterati, although it does not sell a physical product, functions as a brand community that serves as a, 'social aggregation of brand users and their relationships to the brand itself as a repository of meaning' (McAlexander et al., 2002; p. 39). Overall that repository of meaning consists of a litter free world.

Image 6.4: A screen shot of the Litterati branding and tagline.

Idealistic future aside, the work of the Litterati appeals to the heterogeneous values of its members. For instance, for Nate, the Litterati helps educate and engage young people in the environment, science and math, through the data collection component of Instagram. For Joe, it is an activity he can do to clean up his community and provide a clean environment for his children. David perceives his engagement as an act of service to his students, employer and community. For Robert, it is a way to increase the value of the homes in his neighbourhood by ensuring a well-kempt community. Fred, enjoys the creative aspects associated with the Litterati activity but he also indicates he feels the combined efforts of the group are really making a difference. To Fred, the Litterati is accomplishing Jeff's vision of a litter free world, just by the sheer numbers of the people involved and the amount of litter they have collected.

Fred (fredmurs):

> I feel like I'm part of something and to see all of the photos, not just mine, but everybody else's photos, makes me feel like we're actually doing something, Even though I go out in the world and it is loaded with garbage, it is everywhere I know I am only scratching the surface, when I look at the sum total of the Litterati members it makes me feel like we are making a difference, especially as the number of people doing it grows.

Although the charismatic leadership theory helps to explain how Jeff is able to make the Litterati a global activity, the theory does not fully explain *why* an individual would be motivated to engage in new behaviours, especially if they are outside conventional norm behaviour, such as picking up litter. Picking up litter is perceived as a punishment; especially in the United States, where the activity is often relegated to people that break minor laws. The theory further does not help to explain why people with many different core values are able to work together for one vision, Jeff's vision.

6.1.3 High status model

Charismatic leadership theory and motivational theory on charismatic leadership, each presents viable explanations in regard to the '*reasons* to *rules*' component of the observed events. However, this lacks an explanation as to *why* Jeff has this ability to engage others so adeptly. This is where theories on social hierarchies and status contribute to a fuller understanding of the social community. Within the social group, Jeff serves as a high-status model to be admired and copied. He appears to possess a high level of social intelligence given his ability to grow and develop the

Litterati into a brand with global users. This high level of social intelligence, according to Darwin's social dominance theory, discussed previously in section 4.1.4 allows him to develop the skills needed to acquire high status, (Hawley, 1999). This is distinct from a Dominance strategy, in that social dominance refers to the level of influence a person has over others (Cummins, 2005). An individual with high status may have social dominance, yet still be regarded with Prestige (Henrich and Gil-White, 2001). Jeff's skilful ability to engage others allows him to excel within a valued cognitive domain of coalition formation, thereby imparting upon him Prestige (Henrich and Gil-White, 2001). His actions are admired and respected by others, which are in turn copied. This is demonstrated not only with the amount of members the Litterati has been able to acquire and the rapidly increasing amount of litter collected (180,000 pieces collected as of 11 Jan. 16), but also in the way Litterati members perceive Jeff. In Joe's (*plebeianjoe*) description of Jeff, he appears to admire Jeff much like a person would a celebrity; he demonstrates a high degree of admiration for Jeff and his work.

Joe (plebeianjoe):

> Yeah he is like, completely genuine and a good listener and he's got it all. He's got a good brand, he's got good salesmanship, Um and he's honest and he's doing it for the right reasons. So it's good.
>
> So, uh, yeah so, anyway I emailed him a couple times, we talked back and forth on email for about a week or so and then we had a phone conversation and it was really good, it was only a half hour but it was enough we were both, like we were finishing each other's sentences, it was almost like a first date, it was like oh my god, I love you! It was good, so I talked to him, I talked to his brother, and uh it's incredible.

Despite never having met Jeff in person, Joe perceives Jeff to be a good person. Through their limited interaction over email and on the phone Joe has developed a strong admiration for Jeff and the work he does. Jeff is at the top of the social hierarchy within the Litterati. Although charismatic leaders are thought to have ability to call others to action it is the rules within the hierarchy, which are thought to promote copying behaviours.

Within a social hierarchy, individuals must learn what behaviour is acceptable to avoid exile or ostracism. In animal societies or some feudal societies with very stringent social hierarchies, individuals learn which behaviours are acceptable and which are not, in other words, they learn to comply with social norms (Cummins, 2005). Norms within these types of societies are thought to constrain behaviour based on rank (Cummins, 2005; Bothner et al., 2012). Those with higher rank have greater freedom in regard to what they can and cannot do; however, they also must monitor the behaviour of subordinates. As the high-status model within the Litterati, Jeff not only motivates members to engage in the Litterati, but he also informs members that he is watching with his welcome message. He signals his dominance and status by indicating to members that he is monitoring the Litterati posts, he is collecting the data they contribute and thereby imposing constraints on what type of behaviour is acceptable. This is reinforced by the comments posted through the Litterati account, as well as the practice of choosing a 'pick of the day', thus demonstrating to the entire community which photographs are to be modelled, as shown below in image 6.5.

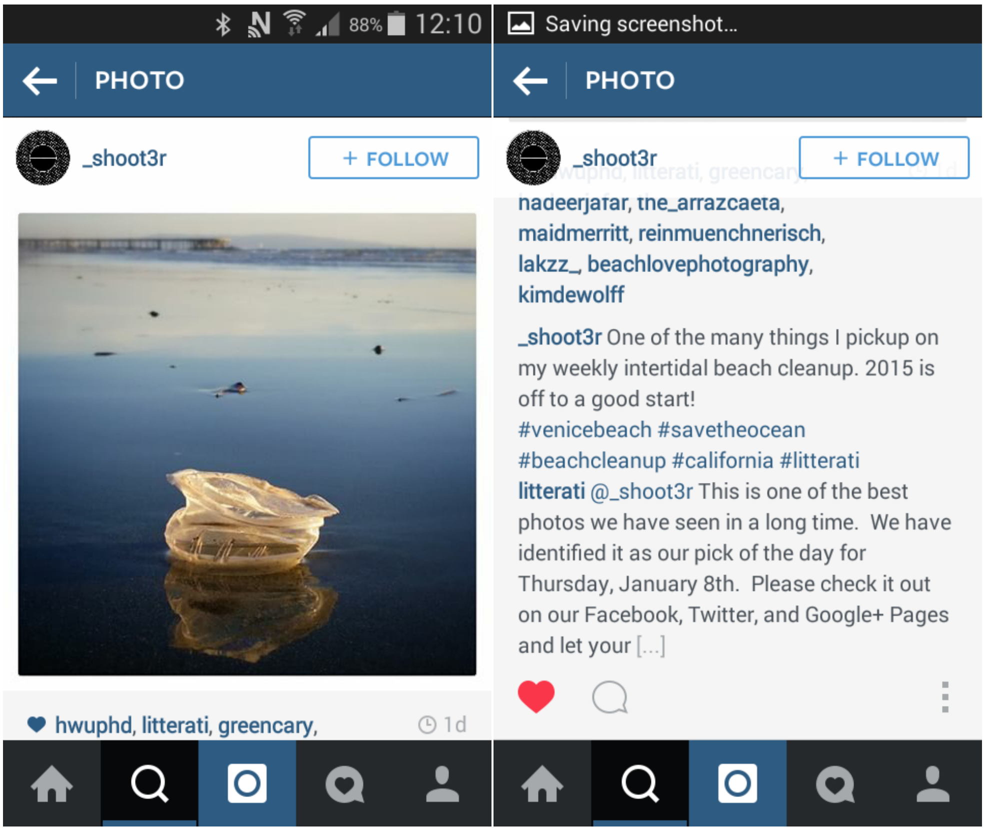


Image 6.5: An image posted by newcomer '*_shoot3r*' receives recognition, praise and status by Jeff for demonstrating high visual appeal, thus showing to the rest of the community, and beyond, what methods or tactics will help you gain status within the community.

In the commentary from the Litterati account, the photograph in image 6.5 is identified as 'one of the best' they have seen in a long time. Thus Jeff uses his rank, his influence, his social dominance to signal to the others the types of acceptable behaviours for achieving status and recognition within the Litterati.

6.2 Success of the Litterati

On the surface, the Litterati appears to be a social cause with compassionate members all working towards a common goal. The increasing success, measured by its global popularity and pieces of litter collected, could be attributed to its charismatic leader, Jeff. Jeff's ability to encourage social change and boost people's perceived ability to engage in certain behaviours has led to the development of a strong community. The strong feeling of community is described by most of the interviewees. Both Leigh Anne and Martha describe the Litterati as their 'people', implying there is more occurring here under the surface. From the sociological perspective, the Litterati may be interpreted as a community of practice. Fry (2010) defines a community of practice as a group of individuals who identify themselves as holding common beliefs, attitudes, rituals, norms, language and values. On first observation this theory would appear to accurately describe the Litterati. However, further analysis reveals the need to explore other theoretical perspectives provided by the conceptual framework used in this thesis, which enables a richer discussion for the underlying structures identified within the community.

Similar to the role group living had on developing the desire for status as discussed in section 3.1, the role of the community is central in developing a strategy for status. While there is a strong sense of community, shaped by Jeff and those closest to him, there is a subtle competitive element as members struggle to assess their place within the community. Litterati members assess their place within the community in several different ways. Fred says during our interview that he did not feel like he was part of a community until he was able to see the map (Image 6.6) indicating where other members are picking up things. He felt particularly connected to those located the furthest away from him, seeing the numbers and points on the map and knowing they were all engaging in the same behaviours connected them. Robert enjoyed showing neighbours the impact he had on the map, stating, ‘look, this is the area where I picked up 110 pieces of litter.’ For these members, interacting in these different ways allows them to build interpersonal bonds and strengthen member attachment to the overall cause of Litterati (Ren et al., 2012).

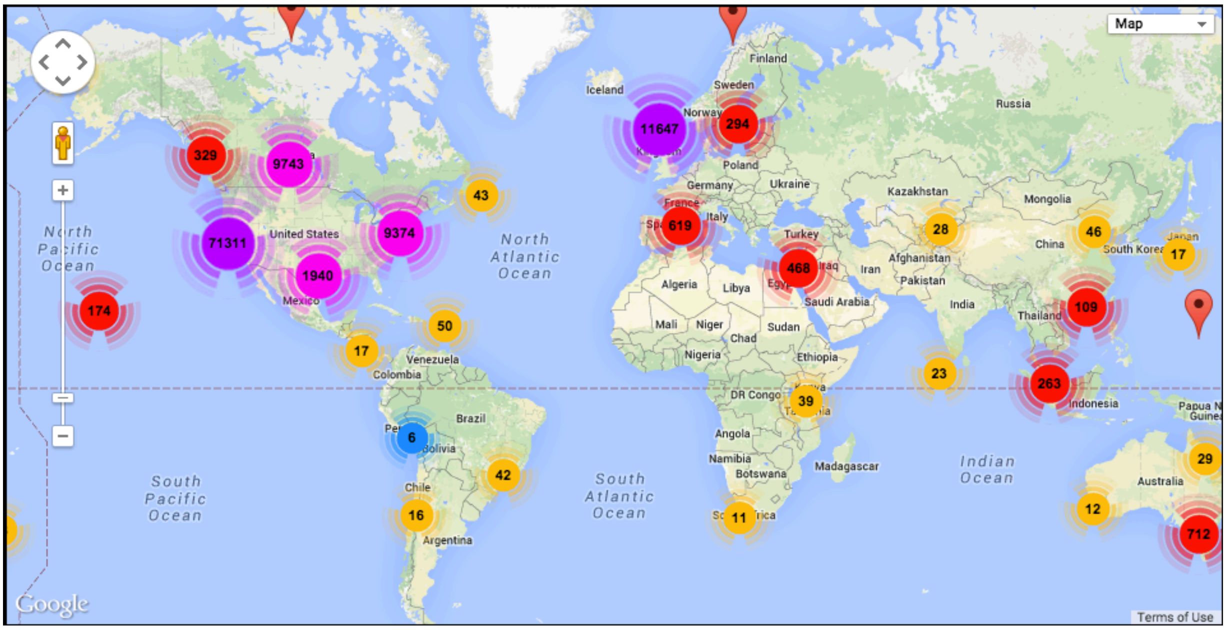


Image 6.6: A screen shot of the Litterati map, which identifies where in the world people are picking up litter for Litterati and how much.

What further contributes to the success of maintaining the Litterati is the notion of socialisation within the online community. Socialisation online occurs through praise, sharing and reciprocity. Trivers (1971) states that reciprocity cements interpersonal bonds and survival of the group. Thus, although reciprocity is a useful tactic for building reputation within a community, it also contributes to the success of the overall group. Reciprocal interactions experienced online have real, or ‘authentic’, consequences for behaviour offline (Kozinets, 1999; 2015). The shared excitement for photographing and picking up litter fosters an environment for behavioural synchrony and fulfilment of larger group goals (Kozinets, 1999; Dávid-Barrett and Dunbar, 2012).

Self-categorisation with the overall group goals culminates in co-creation of identity and self-concept, even when the community is online (Fry, 2010; Seraj, 2012; Belk, 2013). The findings reveal community, co-creation and identity to be predominant patterns or themes among the Litterati. Further, that the self-efficacy is commonly discussed among interviewees and appears to be a critical component to engaging competitive behaviours within a social group, both empirically and theoretically.

Field notes: *Based on observation and my own participation, those that engage in reciprocal liking maintain attention. As an accepted member of the community I noticed a continued presence of certain members through their patterns liking of photographs, as well as a lack of liking. For instance, plebeianjoe, whom describes himself as more environmentally friendly than other East coast people, and travels often, did not like the photographs of people from exotic locations, such as Burma or Thailand. It was unclear why he chose not to like these photos compared to other members in Europe and the US. Gilesthelibrarian does not engage with any other members except Litterati. These observations are reminiscent of a primate activity in which primates that turn their back on low-status others. Gilesthelibrarian appears to be is selective in who he or she interacts with, where the only interactions occur with Jeff. According to Hawley (1999), the act of ignoring low status others is part of a Dominance strategy. However Cummins (2005) attributes this to relative status. High-ranking individuals are not obligated to reciprocate to low-ranking individuals to maintain their status. For gilesthelibrarian interacting with Litterati is sufficient for maintaining his or her high status.*

6.2.1 Co-creation of identity within a community

The Litterati allows for members to express themselves in other artistic formats, for instance, demonstrating collections. The simultaneous activity of production and consumption is termed 'prosumption' (Seraj, 2012). This activity allows members to demonstrate certain skills, such as creativity and knowledge, in a community with less barriers and threat to status than they might experience if going through traditional means. There is greater risk to status and sense of self when exposing artistic skill through formal channels. On the other hand, Litterati encourages artistic expression through prosumption, allowing members to validate and reinforce their sense of self through differentiation. This differentiation among members is thought to enhance the continuity of the community by fulfilling the diverse needs and goals of members (Chalmers et al., 2013). Although the larger goal of the community is focused on protecting the environment, the community itself allows for the fulfilment of additional individual goals, such as creative collections (Leigh Anne), photography skills (Fred and Gareth), service to others (David) and education (Nate).

Field notes: *For Jeff, the data provided from the photographs is a central focus at the moment. He and his growing team are working on ideas on how to use the data* *in a valuable way. Jeff doesn't reveal his plans to me on what to do with the data as of yet, but he envisions big things to come with the information available. Not only do they have time and location information, but also product information. They know items and brands that are most often tossed away. There is the hope that they can encourage people to develop ideas in preventing these items from becoming litter in the first place, a sentiment reiterated by companies that work with Litterati. For instance, Whole Foods in Oakland offered free coffee to patrons who could demonstrate they participated in the Litterati. A V.P. at Wrigley, the gum manufacturer, told me they want to know how they can prevent litter in the first place, beyond messaging on their gum wrappers.*

6.3 Identity and status

In Chapter 2, consumer identity was discussed, along with the relationship between consumption and identity. One of the main points from this discussion was that consumption was perceived to be a social endeavour as well as an individual one. Reed et al. (2012) developed a simple definition of consumer identity by aggregating a range of literature on identity. They define consumer identity as, 'any category label with which a consumer self-associates that is amenable to a clear picture of what a person in that category looks like, thinks, feels and does' (Reed et al., 2012, p. 310). A category label includes items that help an individual self-categorise, such as mother, student, friend, lawyer, etc. These category labels become part of an individual's identity when he or she beings to incorporate this label into his or her sense of self. Individuals then seek opportunities to reinforce these new identity labels through internal and external forms of feedback. Participation in the Litterati provides these forms of feedback as individuals adopt an environmentally friendly identity.

For example, David comments on the struggle of presenting certain identities. He does not want to be known as the person who picks up litter in his town, especially since he values service to others more than environmental protection. Maintaining his core identity as 'service guy' becomes difficult as the online identity extends into his offline identity.

David (ullafayetteservice):

> I got involved with the organisation because I like service, but, god, my wife knows me, so I want to keep reassuring her that I don't want to be known as the 'litter guy'.

> [laughing] And I'd rather be known as the service guy, but it, you know, it's hard for me to separate the two.

David's struggle to maintain an identity through service to others is overshadowed by his new litter picking identity. Although he associates his Litterati involvement with acts of service, he recognizes that others may not given the association of litter picking with punishment. It is through the reinforcement within the network Litterati members that he is able to incorporate 'litter guy' into his core sense of self. As Litterati member identities become stronger, the visible act of picking up litter, along with the photographic evidence serves as a form of investment in potential status and identity (Coskuner-Balli and Thompson, 2013). In their exploration into status and identity among stay at home fathers, Coskuner-Balli and Thompson (2013) argue that social disruptions provide opportunities for individuals to compete for status within social fields that are beyond the boundaries of their traditional social fields. Thus, social media networks act as the social disruption that allows someone like David, to go out willingly and pick up litter, an activity commonly associated with lawbreakers who are ordered to do so.

In addition to the relationship between identity and perceived social status, among the Litterati there is a relationship between identity and object. The work by Ferreira and Scaraboto (2016), described in Chapter 2, discusses the relationship between identity and object. Similar to the Melissa shoe enthusiasts, the Litterati experience a relationship between subject (person) and phone, as well as the object being photographed and collected. In this case, with the Litterati, the phone is no longer just a device for distraction but a tool for social disruption, identity conflict and hierarchy negotiation. In this context the litter or discarded object has value, although momentary.

As the narrative of this data begins to highlight the relationship between identity and status online, there is one more element to discuss. Jeff has been presented as a high status model. He is one to be admired and copied within the community. He displays characteristics of a charismatic leader, however beyond his role as high status model, he also serves as an ideal to be consumed. Ferreira and Scaraboto (2016) examine the relationship between Melissa shoe community members and the plastic shoe, as described in Chapter 2. They suggest the initial relationship with

Melissa shoes is an infatuation, one that is immediate, powerful and irresistible. Similar conclusions could be drawn from the observation and comments regarding Jeff and the Litterati (recall Joe's comments on page 142). The relationship becomes not just the following of a charismatic leader but also as though some members are consuming Jeff, and what it means to be someone like Jeff, a high status model within the context of social media and PEBs.

Wilcox and Stephen (2013) discuss the psychological perspective on social network engagement. They argue that people enjoy using social networks because it fulfils social needs such as affiliation, self-expression and self-presentation. Presenting a positive self-image online, where an individual can control what peers see, reinforces a positive self-image, increases social capital, as well as self-esteem (Wilcox and Stephen, 2013).

Through his activities with the Litterati David is able to build self-esteem and thus increase feelings of pride and prestige. During the interview, David expresses feelings of validation both personally and professionally by engaging in Litterati activities, even though he prefers to be known for pro-social activities as opposed to litter abatement. Ivanic (2015) states that individuals will engage in costly status-reinforcing behaviours to maintain heightened feelings of esteem and prestige, particularly when these behaviours are visible to others. This is clearly demonstrated in the discussions with Nate and David, who both have high status occupations, are actively involved in their own communities and take a particular interest in environmental activities. They both see Litterati as a tool for leadership and education, which is part of their identity within their own communities. Thus by actively engaging in the Litterati, they are engaging in costly activities within the Litterati to maintain their high status as well as their social identity (Ivanic, 2015).

6.3.1 Self-efficacy and identity

While Ivanic (2015) attributes perceived status, identity and feelings of prestige[3] to self-esteem, observations from this thesis indicate self-efficacy to be a greater contributing factor in the subconscious decision to maintain status.

[3] Prestige is lower case to differentiate it from Prestige status.

rubbishwalksCPM exemplifies the repeated notion of having the ability to pick up litter as well as Image 6.6:

Elaine (rubbishwalksCPM):

> And you know when you start to realise, actually, yes it's there, no it's not my responsibility, not my rubbish, I'm not the one who dropped it, it's not in front of my house, it's not my business, um but I can do something about it. I can't fill in a pothole, I can't do other things that need done around the community, but I can pick up rubbish, I can pick up litter.

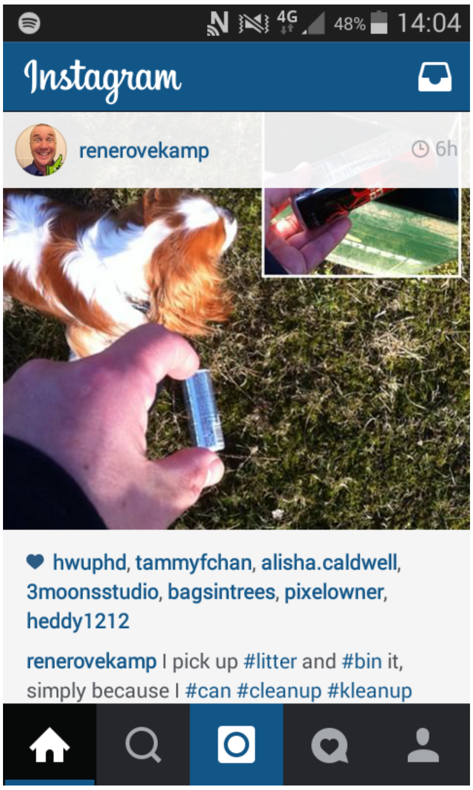


Image 6.7: User *renerovekamp* highlights that s/he has the ability to pick up litter and dispose of it properly, that s/he can do it, implying that those that don't, lack the ability and all the characteristics associated with it.

Both esteem and efficacy are described as cognitive processes, which serve to motivate the undertaking of certain behavioural decisions. Esteem is repeatedly defined as a self-monitoring mechanism based on one's status position and prestige (Judge and Bono, 2001; Buss, 2007; Ivanic, 2015). Self-esteem is described as a subjective meter of other people's perceptions based on social acceptance, according the theory of Social Attention Holding Potential (Buss, 2007). Comparatively, self-efficacy relates to perceived control and expected outcomes or performance of certain behaviours (Bandura, 1977; Judge and Bono, 2001). Within the literature, esteem is considered to be an underlying factor in perceived prestige (Buss, 2007; Cheng et al., 2010; Ivanic, 2015).

Buss (2007) suggests self-esteem may serve multiple evolutionary functions, however, these functions are not fully understood. One function of esteem is said to help in the decision on whom to challenge for dominance and whom to submit to. Applying this to consumer behaviour, esteem is thought to play a significant role in avoidance of certain behaviours or consumption as a means to preserve esteem (Banister and Hogg, 2004).

In section 2.4.2 self-efficacy and PCE were discussed as a barrier to promoting PEBs among wider audiences. The literature further suggested feelings of high-self efficacy were related to a higher uptake in PEBs. Based on Bandura's theory of self-efficacy, social persuasion and social modelling are revealed to be two important factors in promoting self-efficacy and a wider uptake of PEBs. Where this thesis differs from existing research on self-efficacy is the consideration of community as a way to help reinforce feelings of self-efficacy, and thus long-term change in consumption. Jeff, as well as other high status members serves as social models, in which other members perceive to be similar to. These perceptions of similarity may be based on location, photographic style or serve as an aspirational model.

As an online community people like Martha, Leigh Anne and David can connect with others that hold the same interests, and exchange knowledge in which they share a certain level of enthusiasm for. With Instagam, individuals can connect with other users with common interests through the use of hash tags, which link photos to particular topics, brands or causes. Thus, socialisation and co-creation within the online community appear to increase feelings of self-efficacy motivating higher levels of pro-environmental behaviours, extending to purchasing decisions, as described among interviewees. Evidence of the importance of community is presented in the next section.

6.4 The Litterati, the community

The interviews reveal that for Litterati members the activity of picking up is something that they *can* do to protect the environment as iterated by *rubbishwalksCPM* and *renerovekamp*. Picking up litter for the Litterati means they don't need permission and it is informal, sentiments expressed by both David and Gareth in their interviews. Part of that can-do sentiment is reinforced by Jeff. Jeff makes a point of making each Litterati member feel important and nothing short of amazing. My own experiences speaking with Jeff along with the comments made by several interviewees support that. He lets you know your work with Litterati is saving the planet and making it a better place for everyone. With compliments like that it is easy to see why people follow Jeff. In speaking to several Litterati members, it is apparent that Jeff has a way of making each one of them feel special. Those that have spoken to Jeff on the phone or have met him in person describe him as a wonderful person. They all mention how Jeff has relied on them for feedback and testing of beta-versions of new tools. Even those that haven't interacted with Jeff directly comment on how after posting their first Litterati photograph they received a comment about how the planet thanks them for their work. A member who was interviewed wondered if they do that on purpose to suck you in. Another interviewee likened his first conversation with Jeff to a first date. And so, by talking to Litterati members you start to see the importance Jeff plays in making this cause work.

Upon further investigation into Jeff, you find that not only is he great at engaging people but he is also an entrepreneur. He doesn't discuss his background much, but an internet search into his LinkedIn profile shows he has been involved in start-ups for quite some time, especially those driven by social media and marketing. Upon learning this, it appears the beginning of Litterati may not be so humble after all. While the idea may have been from a normal outing with Jeff's daughter, the development of the Litterati is built on years of experience and expertise. It begs the question, is this something he intentionally leaves out of the story? Does this expertise in entrepreneurship take something away from the novelty of the story?

6.4.1 Engaging a global community

In interviewing members, it can be discerned that for many it is not just photographing litter and picking it up. For the members it is a social movement, a community, a creative outlet, an educational tool and even a lifestyle change. The Litterati is more than just the story of Jeff; it is also the story of its members, coming together with 'their people' to make a difference in their small parts of the world. The members are all collectively helping the planet as a whole, but it is their immediate surroundings that they truly care about. The collective sentiment from members is that the overall global impact is a nice sentiment, but each individual places greater importance on the impact at 'home'. Because, according to EP, we are motivated by self-interest and survival, humans have developed an adaptive mechanism, which causes a tendency to disregard impalpable concerns (Penn, 2001). Not to say that it is impossible to care for people and places far away from us, but we tend to care more about our immediate surroundings. Another adaptive trait is future discounting; we care more about what is happening now (Penn, 2001). This again is highlighted by the active engagement in Litterati.

Litter is an immediate environmental concern and is much easier and faster to solve than other climate concerns, such as greenhouse gas emissions. Cleaning up litter is something everyone can do, which is a reoccurring theme emerging from the data collected in this thesis, whereas other environmentally friendly behaviours take greater effort, planning and time. Based on the observations made during this research the Litterati is able to maintain consist, wider impacts on behaviour compared to traditional forms of promoting PEB. The factors that appear to facilitate this impact include visibility, the community feel, the creativity and self-efficacy. Compared to other forms of PEBs, which occur within the private-sphere, the Litterati community creates self-affirming opportunities. The status and self-reinforcing behaviour, provided by the Litterati appears to engage people more widely compared to cutting energy costs or cycling to work or reduced consumption. Thorgesen and Crompton (2009) assert small step activities do not lead to higher effort behaviours, or long term / significant change, however their work did not consider status motives. Among the Litterati there are examples of people engaging in higher effort behaviours, as well as changing their consumption practices. This change among members appears to be a result of the validation and recognition among members and non-members that result in a positive reputation not achieved through other PEB activities.

6.5 Insider view of the Litterati

This section presents my personal reflections based on my field notes on participating in the Litterati in response to the first research. In initial response to Research objective 1, to better understand the paths or routes people use to achieve social status within a hierarchy, entry to the Litterati feels similar to the entry to any new group.

Figure 6.1: Presentation of the problem of status upon entering a new peer group.

While there is the initial welcome from the Litterati main Instagram account, oftentimes, there is little acceptance from other members. I recall my first Litterati post had that initial welcome and a few people liked it, which was very exciting, and it did 'suck you in' however many of my posts after that received little attention. I found this to be disappointing and my interest in taking more photographs dropped significantly. And so, I performed little favours by liking other people's photographs, and I observed the posts of others to learn the style and techniques that garnered attention and acceptance, until I slowly started to build up new followers and make connections. It is clear that without a significant post, which adheres to the normative tactics among the group, it is difficult to gain acceptance and status among the Litterati.

As I have observed and interacted with members of the Litterati for over a year, I find myself endeared to them, especially to the ones I have spoken to over Skype. I find each of their stories extraordinary and feel lucky to have had the opportunity to hear them. Participating in the Litterati has allowed me to better relate to the feelings of uncertainty and discomfort associated with picking up litter. Like many of the interviewees, I have felt the anxiety of picking up litter while other people stood by and stared, with puzzled looks on their faces. I have felt embarrassed, crouching down on the ground to take a visually appealing photograph to garner more attention among the Litterati. I have also felt the stigma of being outside, among nature, yet constantly staring at my phone. Like many of the interviewees, my friends now think of me when they see litter, yet they do not feel strongly enough about it to pick up the litter or photograph it.

Lastly, as I completed my data collection I had feelings of researcher's guilt. In my interactions with other ethnographers at conferences and workshops, this feeling is common. It is difficult to examine participants critically, particularly after getting to know them over extended periods of time. I also recognise picking up litter is a positive activity for the environment; it plays a very small, if not minimal, role in mitigating climate change. However, many of the Litterati members informed during our interviews that this activity was a stepping-stone for higher effort pro-environmental behaviours. For example, David and Leigh Anne both mentioned the Litterati has inspired them to change their purchasing decisions. Both reduced their consumption of plastic packaging and Leigh Anne has begun making her own personal care products. It was such a positive experience seeing how the Litterati is helping people make connections between their consumption and waste.

6.6 Summary of findings, themes and patterns

This chapter discussed the larger themes that emerged from the data collection and analysis. It also presented the macro-level story of the Litterati as a community with the aim to create social change through social media and environmental conservation. The themes of identity and self- efficacy were discussed in the literature review as cognitive functions necessary for behaviour change as described in Section 2.8. Prior to starting the netnography the theme of charismatic leadership was not discussed. The leadership skills of Jeff and his importance to the success of the Litterati became apparent after collecting and analysing the data. He represents as a high status model and sets the norms for the group. Presenting this aspect of the Litterati sets the stage for the following chapter, which examines and explains how the path to higher status might work in accordance with the proposed model. The next chapter will respond directly to the research objectives and propositions and discuss the efficacy of the proposed model as a predictor of behaviour.

Chapter 7: Findings and discussion in support of the model

The aims of this chapter are:

- To describe in the research findings in relation to the proposed model
- To demonstrate how the research objectives and propositions have been fulfilled
- To indicate how this research has further contributed to theories on status.

Recall the research objectives as written in Chapter 1 and again in Chapter 5 are:

1. To identify patterns which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members;

2. To explore how people compete for higher status within an online community called the Litterati, a subculture of pro-environmental behaviourists;

3. To better understand the paths or routes people use to achieve social status within a hierarchy;

4. To evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community; and

5. To discuss how a strategy for social status, competition and tactics can be applied to the theory of the universal desire for status.

Furthermore, four research propositions for theoretical contribution were listed in Chapter 4. They are:

Proposition 1. Dominance and Prestige are the two distinct and separate strategies for achieving status.

Proposition 2a. Based on the reported characteristics of Prestige, cooperative competition and copying, it is proposed under a Prestige strategy for status cooperative competition is a direct competitive construct and copying is an indirect competitive construct.

Proposition 2b. Based on the reported characteristics of Dominance, agonistic competition and calculated cooperation, it is proposed under a Dominance strategy for status agonistic competition is a direct competitive construct and calculated cooperation is an indirect competitive construct.

Proposition 3. Individual differences, such as perceived self-efficacy, and social cues influence the use of one strategy over another.

Proposition 4: The combination of figures 4.3 and 4.4 create a theoretical model that describes the path for achieving higher status.

The previous chapter described the themes that arose from the data in response to research objective 1. This chapter will begin by applying the themes and patterns to Dominance and Prestige strategies for status extracted from the qualitative data. Analysis of the data indicates the charismatic leader, Jeff and the community he has built establishes the norms and useful tactics to navigating the hierarchy within the Litterati. Figure 7.1 (originally presented in Chapter 4) indicates a gap in the literature regarding the relationship between strategy for status, competitive construct and tactic. In order to fulfil the gap in the literature this chapter will identify the path for achieving status. This description will start with the tactics used to compete for status, along with an examination of how these tactics are used under a strategy for status. This chapter will first identify the tactics used amongst the Litterati for increasing status, and then discuss how these tactics are used competitively. Examples of each competitive construct will be discussed and finally the demonstration of Dominance and Prestige will be examined, presenting all the supporting data from the participant observation, interviews and questionnaires.

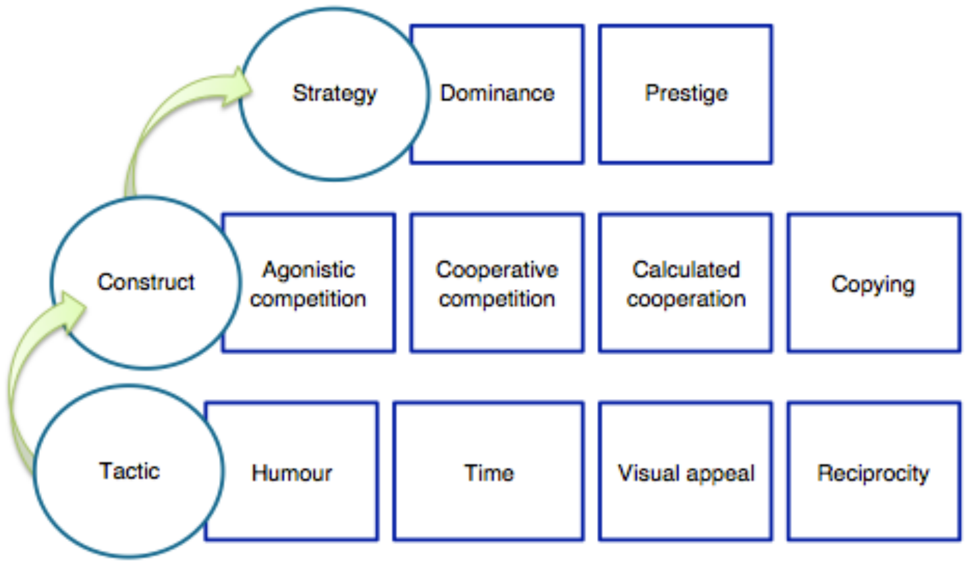


Figure 7.1 Highlighting the unknown path for higher status.

Demonstration of Dominance and Prestige is discussed as a result of the dynamic relationships between the observed tactics, prevailing themes and underlying structures to complete research objective four. The tactics identified from the data include visual appeal, humour, reciprocity and time, and are presented as observed events. Each tactic is further discussed in terms of cost signalling theory, consistent with the fifth research objective.

7.1 Tactics for competition among the Litterati

Research objective 2 seeks to uncover the ways in which people compete for higher status within the Litterati. To be able to compete for higher status, individuals use a variety of resources available to them; these resources are manifestation of behavioural decisions, or tactics, as previously defined in Section 4.1. Among the Litterati the four tactics for hierarchy negotiation include visual appeal, humour, time and reciprocity. Each tactics will be discussed in its own section, where each tactic is defined, the value of it is described and lastly its function in terms of cost signalling is discussed.

Tactics are described as the manifestations of behaviour under a larger cognitive process or strategy to fulfil a particular goal. Individuals are thought to use different patterns of tactics based on their individual goals, using only acceptable tactics for hierarchy negotiation consistent with context specific group norms (Kyl-Heku and Buss, 1996). For instance, in the description of status signalling among Harley Davidson owners discussed in Section 3.3.5, tactics for navigating the social hierarchy in that case rely on the consumption of Harley Davidson branded goods, demonstration of mechanical understanding and endurance in riding. The next section will describe each tactic specific to observations among the Litterati in greater detail to fulfil research objective 2, while exploring the relevance of cost signalling theory to better understand how individuals use these tactics to compete for higher status.

7.2 Visual appeal

As the community synchronises in accordance with Jeff's vision, adhering to the norms he imposes through his posts, visual appeal is revealed as one of the most valuable tactics for gaining status. Visual appeal is defined as innate preferences to certain images, often characterised by certain colours, such as blue (Dutton, 2009), or configurations of symmetry (Saad, 2009) and landscapes (Penn, 2003). Although the main goal of the Litterati is to 'crowd-source clean the planet' the visual aspects of the posts have become an integral component of being a member of the Litterati. Evidence to support this includes the comment from Jeff in Image 7.1, as well as comments observed from other members, as seen in Image 7.2 and thoughts expressed during interviews.

7.2.1 Evidence of visual appeal among the Litterati

Observation and participation in the Litterati indicates visual appeal is a strong factor in gaining status among the Litterati. Members whom are able to produce visually appealing photos receive recognition from other members through comments and likes. Further evidence in support of the importance of visual appeal is found in the comments from interviewees. As indicated below, the Litterati members that produce images adhering to the characteristics of visual appeal are remembered, revered and copied. In his interview, Gareth indicates that producing high quality photos is one of his goals when he goes out to collect litter. The images below by are *_shoot3r* and *jannisselbyjones*. Both of their names are discussed by interviewees as aspirational models. *Janisselbyjones* and *_shoot3r* consistently produce photos with large landscapes and blue oceans. These images receive a significant amount of positive comments and many likes. In the vignette below, David recalls the Litterati members he notices and why he finds them appealing.

Image 7.1: *Janisselbyjones* comments on beauty and interest of the photograph taken by *_shoot3r*.

David (ullafayetteservice):

> So I did notice your pictures, I noticed *janiselbyjones*, I noticed *bagsintrees*, *exposingtrash* and probably, I mean there, I know there are more too, again being involved in this immediately turned my attention to some others and a lot of times not because of the trash itself but because of the quality of their photography.

David, as well as Nate, Joe, Leigh Anne, Gareth and Fred, comment on the visual appeal of other people's photographs during their interviews. The photographs they all tend to find more interesting are the ones that they describe as high quality, unique or visually stunning. Leigh Anne goes so far as to say that she often has feelings of jealousy or envy of people who take photographs along the beach. She is attracted to these photographs; however, because she feels as she cannot produce the same type of images because she lives in a landlocked region. Thus Leigh Anne must find other ways to gain status within the community. Jealously may lead to the decision to undertake a new tactic, competitive construct or strategy to increase her status within the community. Over time Leigh Anne did alter her tactic by taking photos of large bags filled with trash collected to demonstrate more aggressively her devotion to the cause and ability to spend time collecting large quantities of litter.

Nate is attracted to the uniqueness of a piece of litter; he tries to find things that indicate a specific place or sentiment. When it comes to 'liking' other people's photographs, he looks for items that are unique, that give a sense of place different from his own. Joe, Fred and David contribute to these thoughts by also indicating they search for items that are unique or interesting, however, their definition of interesting varies. For instance, David, similar to Leigh Anne, enjoys a lot of the images posted from coastal areas. His reasoning behind this is because he also lives near the coast and enjoys that type of scenery. When interviewees are asked about which members they find the most interesting, as indicated in the quote above by David, *janisselbyjones* is mentioned repeatedly. The images posted by *janisselbyjones* consistently include coastal scenery, but the object is typically unique or unexpected (Images 7.2, 7.3, 7.4). These photos receive many compliments, for instance in image 7.3, one person comments, 'such a beautiful backdrop for someone's trash.' This comment and others like it support the notion that certain characteristics are visually stunning for a wide variety of people, even if the subject of the photo is litter. People value the aesthetics of these photos, particularly the landscapes.

Image 7.2: Image taken by *janisselbyjones.*

Image 7.3: Image taken by *janisselbyjones.*

Image 7.4: Image taken by *janisselbyjones.*

7.2.2 The value of visual appeal

It is posited that there is an innate attraction to certain types of photographs or images (Penn, 2003; Dutton, 2009; Townsend and Sood, 2012). In his book titled the *Art Instinct,* Dutton (2009) describes the universality of aesthetics. Evidence to support this notion is found in the discussion of a cross-cultural study conducted on the 'most wanted art' (Dutton, 2003). A study reviewed by Dutton (2009) reports that when survey respondents and focus groups were asked to indicate what aspects they find most appealing about art, respondents indicated they valued art containing people, animals and landscapes, particularly blue landscapes. These preferences are thought to be explained by the 'Savannah Hypothesis', which indicates strong preferences for landscapes resembling the East African savannah where hominid species split from chimpanzees. The landscape indicative of this location signifies a wealth of proteins from an abundance of food, hills that provide strong vantage points and trees to provide safety from predators (Dutton, 2003). The images that acquire to most attention, exhibited by likes, comments and shares, among the Litterati members tend to exhibit these characteristics, as demonstrated in Images 7.1 thru 7.8. Specific qualities of taste or aesthetics may vary from culture to culture, yet there are broader, universal qualities that appeal to innate, evolved preferences (Townsend and Sood, 2012). It is suggest that this innate desire for certain natural aesthetics, known as *biophilia*, fosters the motivation to preserve our natural surroundings (Penn, 2003; Dutton, 2009). Thus, it is argued people are prone to admire photos not only with respect to the landscape of the photographs, but also the symbolic representation of preservation.

7.2.3 Visual appeal and cost signalling

Townsend and Sood (2012) assert that humans hold aesthetics as a personal value and that possessing objects with high aesthetic value uphold an individual's perceived self-worth. The ability to produce or acquire objects that are aesthetically pleasing is thought to symbolise an abundance of resources (Dutton, 2003). Aesthetically pleasing Litterati photographs represent the ability to spend time, effort and money, to produce or acquire aesthetically pleasing objects. Even in the instance of Litterati photographs, the skill required to take visually appealing photographs is difficult for others to replicate and is often admired. For example, *steinbroh* routinely receives well over 100 likes for his or her photographs, which is significantly greater than most other Litterati members. Members such as *steinbroh*, *janisselbyjones* and *_shoot3r* demonstrate a unique ability or talent by producing images that not only appeal to others, but also influence the style of other members. The ability to produce photos that are well liked presents an adaptive quality, a resource richness that is difficult for others to produce. Consistent with cost signalling theory, members of the Litterati are able to compete for higher status within the community through the production of visually appealing photographs. This is supported the by high number of likes and comments a person receives and the ability of interviewees to recall their identities.

Field notes: *Further supporting the universality of Litterati photographs, my own friends who are not part of the Litterati often admired my photographs. A close friend of mine, whom I have known for a long time and I have spoken to about my research took a photograph of litter and shared it with me because he thought I would be interested in it. He didn't post it on Instagram, despite having an account, but it does indicate that there is an effect on non-engaged users. Fredmurs, plebeianjoe, 3moonsstudio and ullafayetteservice all describe similar instances with friends, where they receive positive feedback from friends outside the community but none have been motivated to participate. While these admirers can appreciate the* *images and the behaviour behind the images, they do not identify with the community and therefore do not engage in it.*

The collection of images below contains images that receive a high number of likes and comments. Both *steinbroh, newquaybeachcombing* and *plebeianjoe* receive over 100 likes per photo. Additionally, *janisselbyjones* receives many comments on the quality of the photo produced, along with compliments from high frequency users (users that typically post several times per week).

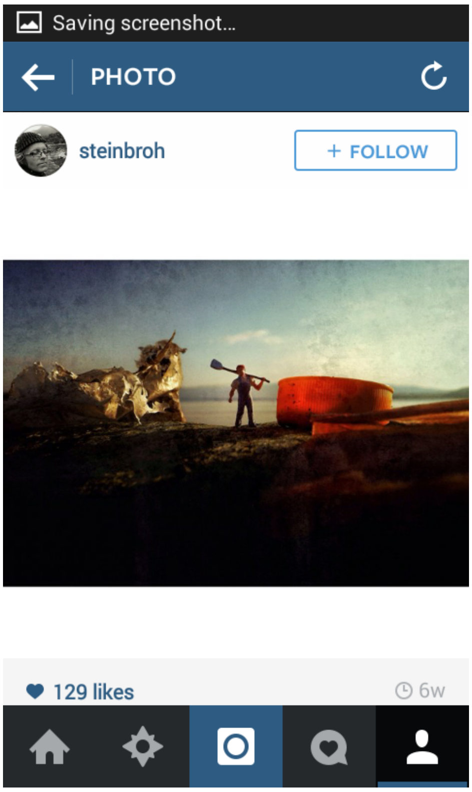


Image 7.5: Image taken by *steinbroh.*

Image 7.6: Image taken by *janisselbyjones*.

Image 7.7: Image taken by *newquaybeachcoming*.

Image 7.8 and 7.9: Image originally taken by *plebeianjoe* and shared by *thingsifindwhilewalking,* along with a screenshot of commentary between members.

Field notes on Images 7.5 – 7.9*: The collection of images here demonstrates the tactic of visual appeal and the resulting admiration it achieves. The images are liked by a significant number of people; average images are typically liked by less than 10 people. Image 7.6 receives several compliments. Image 7.8 is an image originally taken by plebeianjoe and shared by thingsifindwhilewalking. It is so well admired it is even questioned whether or not a simple camera phone is used or if plebeianjoe uses something more sophisticated.*

7.3 Humour

The next tactic identified from participant observation is humour. Most forms of humour or laughter occur spontaneously during informal conversations, thus making it difficult to identify or measure (Greengross and Miller, 2008). What might be considered funny in situations may be considered mundane if presented in another context. Robinson and Smith-Lovin (2001) study the use of humour on small group discussions. Through a review of the literature, they argue that humour, like beauty or art, is difficult to define; yet you know it when you see it. For the sake of evaluating humour, Robinson and Smith-Lovin (2001, p. 124) define humour as any remarks within an on-going interaction that are designed to evoke joviality.

Jeff often incorporates witty remarks or tag lines in his posts. These will typically involve a play on words or something associated with a brand in the image. Jeff's use of humour also typically involves affiliative forms through references to pop culture or dissociative forms derogating the people who left the object behind. In Image 7.10, the caption reads: ‘you are now free to clean about the country.’ This is based on the US airlines, Southwest Airlines’ advertising tagline from a popular commercial in which, after the seatbelt light goes off, the announcer announces, ‘You are now free to move about the country.’ Other members follow this model and attempt to add witty tag lines to their posts as well. This reflects one of the two types of positive humour discussed in Section 4.4.5: affiliative. This type of humour connects members to popular culture, particularly those familiar with American popular culture. American Litterati members are in on the joke, whereas international Litterati members may not connect with this image or the humour.

Image 7.10: An image taken by *Litterati* of a discarded envelope from Southwest Airlines and play on words with the tagline.

Another form of humour demonstrated by Jeff is exhibited in Image 7.11. The image captures a discarded packet of energy gel typically used by runners during long runs to maintain stamina. In the discussion on the item several members are unfamiliar with the product, however the message is not lost on them. The tagline on the product packet informs viewers the product provides energy, while other members provide additional information on the product. The image garners a lot of discussion as well as likes, indicating it is well received. This fits with the definition of humour provided by Robinson and Smith-Lovin (2001). The derogatory tone towards the litterer unites the Litterati members while distancing themselves from the litterer. Member *sozavac* adds further dissociation by commenting that he/she dislikes seeing these on their runs.

Image 7.11: Evidence of dissociative humour derogating the person that littered, stating the person who used the energy gel, most likely on a run, lacked the energy to pick up the litter or carry the used packet.

7.3.1 Evidence of humour among the Litterati

Jeff's use of humour sets the tone for other members when posting items, so much so that it becomes an additional goal in posting an image for many members. *Gareth* mentions this in his reflections on his Litterati methods.

Gareth (gd4561a):

> Sometimes I might use a clever tagline, or add text to an image.

Within his reflections Gareth does indicate the visual appeal is his main focus in creating Litterati posts as that is what he feels connects him to the community; however, he does also try to incorporate a 'clever' tagline in his images. Evidence of humour is typically found within the tag lines, however, it can also be found in the conversations spurred by the images. In Image 7.11 *gilesthelibrarian* muses about what could be said regarding the fuzzy pink balls of yarn in the image. Jeff encourages *gilesthelibrarian* to 'go there' thus fostering an environment for humour. Another image, 7.12, posted by *hollydurrence* captures an empty condom package and is responded to with text resembling laughter. Humour among the Litterati is typically positive and affiliative, however, there is some evidence of dissociative forms of humour, aimed at the anonymous people who litter, as shown in Image 7.13. From the social dominance theory perspective, this is a way to assert group dominance over others of lower status. In this case, the Litterati as a whole asserts its dominance over anti-social behaviour such as littering.

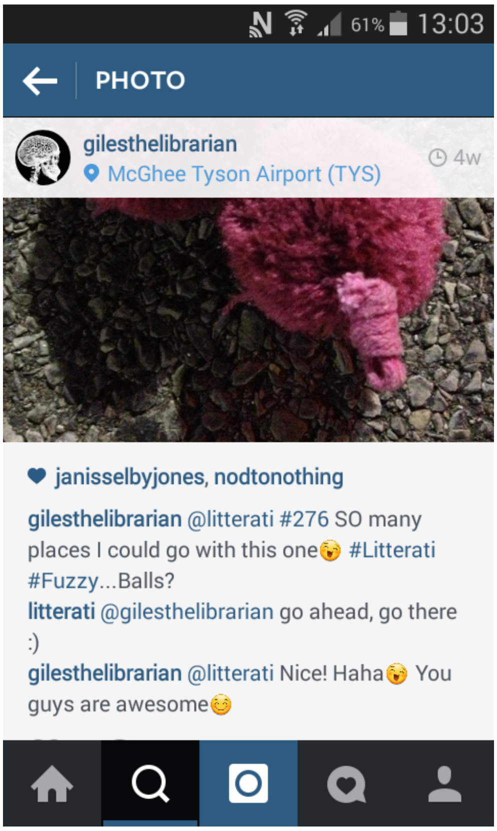


Image 7.12: Image taken by *gilesthelibrarian*.

Image 7.13: Image taken by *hollydurrence.*

Image 7.14: Image taken by *thewhiskeydude.*

Field notes on humour: *Humour among the Litterati is difficult to demonstrate to an outsider. In this instance having an insider view of the community as well as participating in the act of posting images to Litterati on Instagram, allows for easier identification of humour. Being an American helps as well, given the concentration of Americans within the community, however the global reach of many of the products found as litter, as well as the spread of western culture increases the appreciation for certain remarks. I found as I participated more in the Litterati I too* *developed a goal for not only creating visually appealing images but also creating clever or witty taglines to accompany them. In many instances, thinking of a funny thing to say about a photo took the most time.*

7.3.2 The value of humour

The use of humour among the Litterati serves many functions. In the first instance, humour as a resource demonstrates a form of social intelligence (Greengross and Miller, 2008). Those that have the social intelligence to recognise humour as a useful tactic will use it to gain status among peers. Studies on humour show that it may be used in both affiliative and dissociative ways. Although a cohesive theory on humour is still lacking within the literature, several studies have shown humour to be used in instances of forming group cohesion, but also to assert one's rank or status through exclusion and disassociation (Greengross and Miller, 2008; Hodson et al., 2010; Huuki et al., 2010). The example of humour in images 7.9, 7.11 and 7.12 demonstrate positive forms of humour, the taglines are not derisive towards another group or individual. However, Litterati members also resort to derisive negative humour, used to disassociate themselves from the people that do litter. Image 7.13 shows *thewhiskeydude* denigrating the person who left behind the bottle in the image. The use of dissociative humour in this way dehumanises the people that litter (Hodson et al., 2010). This form of humour also distances *thewhiskeydude* from the act of littering. Typically, this is type of humour is studied in relation to legitimising myths of discrimination on much larger social issues such as racism and sexism, however, within this context, disassociating from litterers is a way of asserting dominance or superiority towards an out-group (Greengross and Miller, 2008; Hodson, et al., 2010).

Secondly, humour has been shown to relieve stress, particularly in situations where individuals must adopt new norms (Robinson and Smith-Lovin, 2001; Hargreaves, 2011). In the instance where picking up litter goes against conventional social norms, incorporating humour into the activity helps ease the discomfort of engaging in the Litterati. Leigh Anne relieves stress by using self-depreciating humour to help overcome the discomfort of going out in public and picking up litter.

Leigh Anne (3moonsstudio):

> I mean my mother probably thinks I'm completely nuts, but she wouldn't say anything. Yeah it's funny, I don't know what people think when they see me out there. Yeah, I'm like I guess I'm that lady. That crazy lady I used to see when I was kid, like flannel shirt, like grey hair, like picking up garbage.

Similar to Leigh Anne's sentiments, recall David (p. 135), jokingly says he does not want to be known as the 'litter guy', while Joe describes concern for appearing like a 'crazy' person picking up litter. Robinson and Smith-Lovin (2001) indicate use of humour leads to increased levels of energy, a positive attitude towards undesirable activities and greater willingness to engage in higher effort enterprises, such as picking up litter.

Field notes: *I found in my own experience I too resorted to humour to overcome the discomfort of picking up and photographing litter every day. Although I had the support of other Litterati members and my friends, there was still a strong feeling of uneasiness associated with picking up litter. I went so far as to perform stand up comedy about my research and picking up litter, which resulted in a renewed vigour for conducting my research. Humour appears to be a strong motivator and unifier among the Litterati.*

Lastly, within marketing and theories related to the consumer culture theory perspective, the use of humour and memes would be considered a form of cultural capital or *habitus* within this specific subculture of consumption (Holt, 1998; Croft, 2013). Humour in this instance is the manifestation of an underlying structure of certain actions that are specific to a particular institution or community such as the Litterati. Cultural capital in the form of humour and other rituals among the Litterati are thought to be a significant form of currency within this subculture of consumption.

7.3.3 Humour and cost signalling

Humour functions as a unique way to for defining reality, where according to Robinson and Smith-Lovin (2001, p. 125), 'it deconstructs social meaning, thus allowing us better insight into otherwise invisible structures.' As research continues to narrow the definition of humour and its function, current theory suggests humour facilitates hierarchy structures (Robinson and Smith-Lovin, 2001; Hodson, et al., 2010; Huuki, et al., 2010). Joking is thought to create status differentiation, where disparaging forms of humour facilitate distancing between high-status in-group members and low-status out-group members (Robinson and Smith-Lovin, 2001; Hodson et al., 2010).

In their study on humour, status and gender Huuki, et al. (2010) identify humour as both a resource and a strategy that helps in maintaining culturally accepted symbols of status. They argue humour is a type of resource that transforms strategies in such a way that the actor may gain power or status within a peer group. This perspective on humour could be attributed to one of three main theories explaining the motivation of humour, superiority theory (La Fave, et al., 1973; Perks, 2012). Superiority theory suggests humour functions as a means of increasing feelings of self worth by putting down or denigrating a target as exhibited in images 7.11 and 7.14. Perks (2012) suggests three main theories form a cohesive understanding of the function of humour. Beyond superiority theory, humour is further theorised to be motivated by incongruity and relief. Incongruity theory on humour argues that humour occurs when observed events are inconsistent expectations or known frameworks. This theory serves to explain the reactions in image 7.13, observing an empty condom box in the wilderness is unexpected and therefore humorous. Relief theory suggests humour and thus laughter relives tension and stress (Hodson, et al., 2010). Relief theory explains why humour is not only prevalent, but also a goal among Litterati members. Given that most members are stressed or concerned about the environment applying humour to engaging in PEBs, especially one that is uncomfortable to engage in provides relief, as described by Leigh Anne.

Regardless of the type of humour used, to engage in humour, or to create humorous interactions relies on highly developed cognitive capabilities, such as language, intelligence and creativity (Greengross and Miller, 2008). These skills or cognitive abilities are difficult for others to copy and can be perceived as a signal of overall resource fitness and genetic quality (Greengross and Miller, 2008; Hodson et al., 2010). Huuki et al. (2010) observe cost signalling through humour among adolescent boys. Observed interactions between higher status boys and lower status boys provided the opportunity to strengthen status by making fun of the lower status boys. As high status boys attempted to out do each other by being funnier, they were able to increase the attention they received. Their study followed students from elementary school to high school. One observed student was able to continuously use humour over several years to maintain a high status. Huuki et al. (2010) attribute this success to his ability to use irony combined with his knowledge of social structures around him. Although having the ability to use humour indicates a high level of cognitive skill, the use of humour poses risks for the actor. In the instance humour is used in either a self-depreciating or other-depreciating way it could backfire. If the attempt at humour fails the actor could face ostracism, violence or other forms of social punishment (Greengross and Miller, 2008; Hodson et al., 2010).

Humour among the Litterati appears to pose little risk in terms of violence and ostracism. The greatest threat to failed humour among the Litterati is a decrease in social attention among members, and thus a loss in status. Humour appears to be a shared value among the Litterati, especially for dissociation with out-group members within the online forum. Members that are successful in creating humour through their photos or taglines achieve high status, thus making humour a goal among members as described in interviews. Visual appeal appears to be more highly valued as a method for increasing status, humour among the Litterati is revealed as a close second; however, humour as a tactic for status, especially online, could benefit from greater examination in the future.

7.4 Time

In terms of using tactics to signal status, or the ability to acquire status through cost signalling, the one that is the most difficult to compete with is time; as is evident from the participation in the Litterati and discussed during the interviews. Each post uploaded sends an honest signal to others about the abundance of time a member has; a key factor for altruistic-motivated competition as identified by Hardy and Van Vugt (2006). The cost of time is a consistent barrier or cost to members as far as posting more photographs.

Field notes: *As you participate in Litterati you become keenly aware of how time-consuming it can be. This is especially true if you take a large volume of photographs. I typically combined the task with walking my dog. Fred combined the activity with exercise; Joe, Robert and Elaine combine litter picking with walking to work, but also dedicate significant blocks of time to it on days off. While going out* *and picking up litter is time-consuming, what is most time-consuming about the activity is the uploading and tagging of the photographs. Each photograph needs to be uploaded individually and then tagged. Those that add in witty remarks or edit the photographs to make them more appealing require even greater amounts of time. From my own experience and of experiences reported by others, time appears to be the biggest constraint to participating in Litterati. It is this constraint that allows individuals who post high volumes of pictures to stand out.*

Nate (swlrp):

> And I don't pick up everything I see because I see the rabbit hole of that, like there's like, if I just started picking up everything that'd be the end of the day, there'd be nothing else to do because there's plenty.

7.4.1 Evidence time among the Litterati – volume

Evidence of time is demonstrated in multiple ways, which are both direct and indirect. The most overt demonstration of time is the volume of photographs posted. For instance, certain members will post 60–100 posts a day, which reflects several hours of picking up and photographing litter. Images 7.15 – 7.17 were produced by three members whom I observed posting 60-100 photos a day. The photos produced by *maidmerritt, gotcha_106* and *cleandimond* often appear as though the person stops momentarily, takes the photo from a standing position, as opposed to getting up to the item, and moves on to the next item. This behaviour floods the Instagram feed, such that only photographs posted by those individuals are visible. Nate later mentions in the interview these people are 'always present', yet their names are not easily remembered. Three individuals that demonstrate this behaviour regularly are *gotcha_106, cleandimond* and *maidmerritt.* Their photographs often appear blurry, or rushed and lack the same type of appeal indicative of other higher-status members such as *janisselbyjones* or *fredmurs.* Another characteristic of these members is that they use time solely for the act of picking up and photographing litter. In the quote above by Nate, he mentions that he is unable to stop and pick up everything because it would consume his entire day. *Maidmerritt, gotcha106* and *clenadimond* appear to spend all day picking up litter based on my own observations. On days when I would check Instagram throughout the day, these three individuals had posted photos continuously. What further distinguishes this type of user from other members I interviewed and interacted with is that these members rarely comment on or like other members' posts, nor do they respond to comments left by other members. This suggests a form of agonistic competition and Dominance. There is a lack of pro-sociality in their pro-social behaviour where the resource of time is abundant for picking up litter, but there is no time for building relationships or engaging with the community.

Image 7.15: Taken by *cleandimond.*

Image 7.16: Taken by gotcha_106.

Image 7.17: Image taken by *maidmerritt.*

Field notes on Images 7.15 – 7.17*: Examples of images posted by members that produce a high volume of posts. These members demonstrate the high resource of time, in that they are able to devote several hours per day to picking up and photographing litter. santacruzlife27 comments on the amount of posts by gotcha_106 on a particular day. gotcha_106 does not respond.*

7.4.2 Time: editing

Fred is a member who demonstrates this point well. His unique style of photographs garner him a great deal of attention, so much so that most interviewees mention him as a member they admire. Even Jeff, when sharing Fred's photograph, comments on Fred's unique style by stating: 'You can always tell a Litterati photograph from *@fredmurs*.'

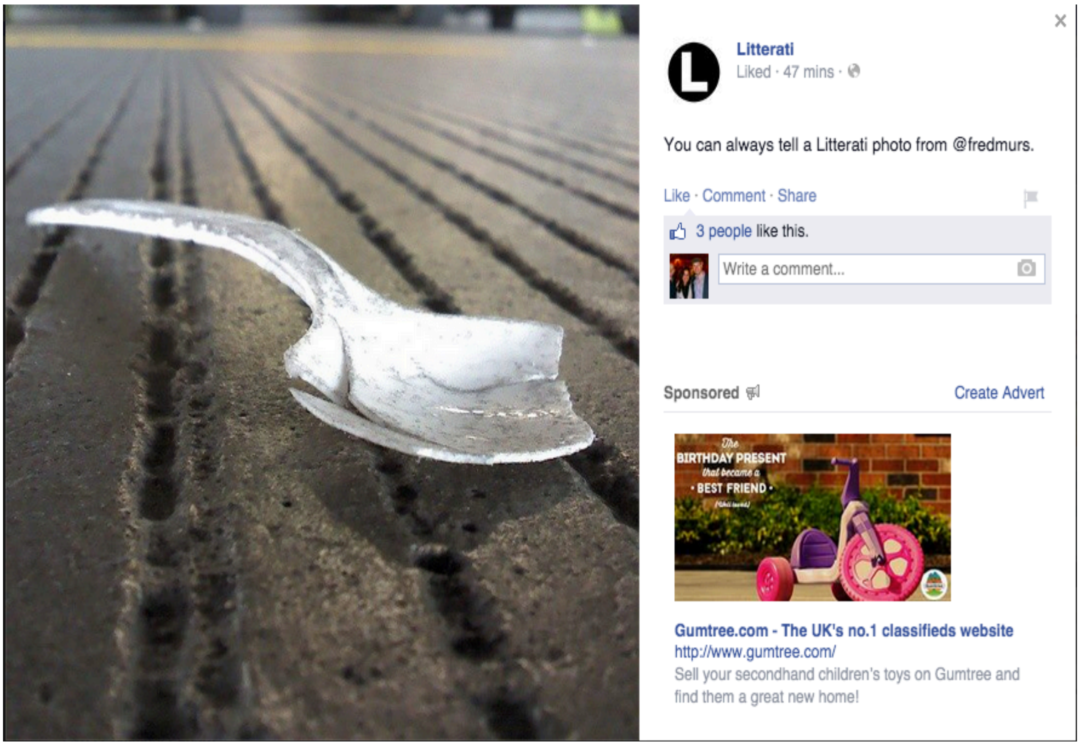


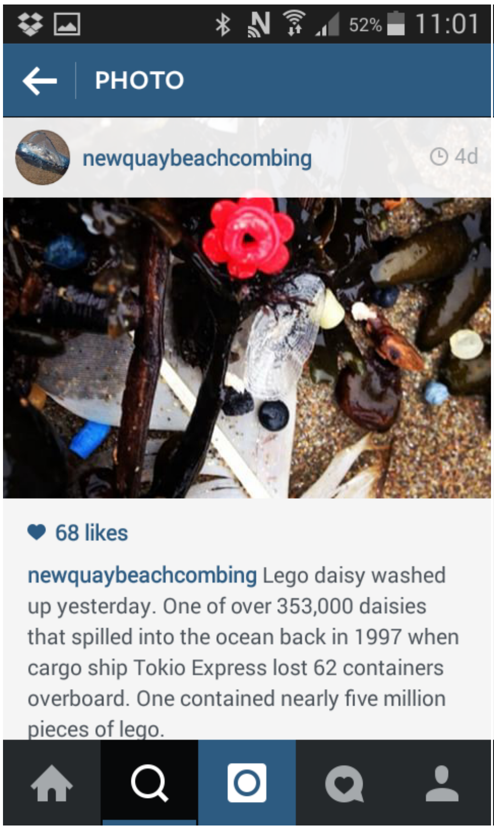
Image 7.18: Image taken by *fredmurs.* Here Jeff highlights the unique style of Fred's images, which upon interviewing Fred is indicative of the time he devotes to taking photographs.

Fred is willing to devote time to this activity because it is something he enjoys doing. In the interview he mentions he really enjoys the small manipulations he makes with photographs. His time is less focused on the action of preservation of the environment, and more so on the photography aspect. Fred has a desire for expressing himself through creativity, and Litterati enables him to do so, without feeling the pressure to be in his words, 'a brilliant artistic genius'. Thus, where Fred feels he may not possess the skills to be a prestigious artist within more formal channels, Litterati enables him to demonstrate his perceived resource fitness, where his time is devoted to this developing photography as a unique skill, which in turn allows him to gain higher status. Although he says he does not have a great deal of time to devote to Litterati, he spends more time on the photography aspect of the activity. When asked about his process for taking Litterati photographs, he mentions that he typically takes four or five shots of the same item and then goes home and edits the photographs, only keeping the images he is happy with.

The cost of time here is less of a sacrifice because of the enjoyment he gets from taking the photographs. Conversely, when asked about engaging in other types of pro-environmental behaviours, Fred explains he does not have the time to devote to those types of activities. He provides the example of receiving a flyer for a community litter abatement event. He states in the interview he does not have the time to participate in something like that. Etkin et al. (2015) attribute feelings of conflict with time to competing individual goals. Fred may have competing goals, which places greater emphasis on creativity than environmentally friendly behaviours. Further discussion with him reveals recent changes in his life, support goal-conflict theories presented by Etkin et al. (2015). Once a senior staff member at a local record store, Fred had high status in a creative field, music. This perceived identity was supported by his collection of over 10,000 record albums in his private collection. However, divorce required him to move cities, change jobs and discard 75% of his music collection. Fred's previous lifestyle conflicted with his goal of being a good parent, however, his new life did not provide the same opportunity for status and prestige he once had. Litterati, through the aspects of creativity and validation, provides that for him. Thus, Fred has the time to devote to skills development and creativity, but not to other pro-environmental exploits.

7.4.3 Time: collecting

Time is also used to display collections and knowledge. Members such as *newquaybeachcombing, mcphersonsteve*, *415plumber* and *2minutebeachclean* demonstrate this. Items in the photographs are collected, cleaned, organised and photographed. Some members even go so far as to research the items they collect, or reach out to the companies making the products – as *smartie_lids_on_the_beach* declares doing. *Newquaybeachcombing* describes Lego items found along the shores of the UK as linked to a transport ship from China that had sunk. Millions of Lego pieces have washed up along the shores and continue to do so twenty years after the incident, taking cost signalling one step further by demonstrating knowledge, that other members may not have, further supporting the cost signalling tactic of time. This person not only has the time to go out and collect large amounts of litter, clean it off and photograph it, but they also have the time to research the origins of the litter. Thus, using knowledge combined with the tactic of time to further increase his or her status.



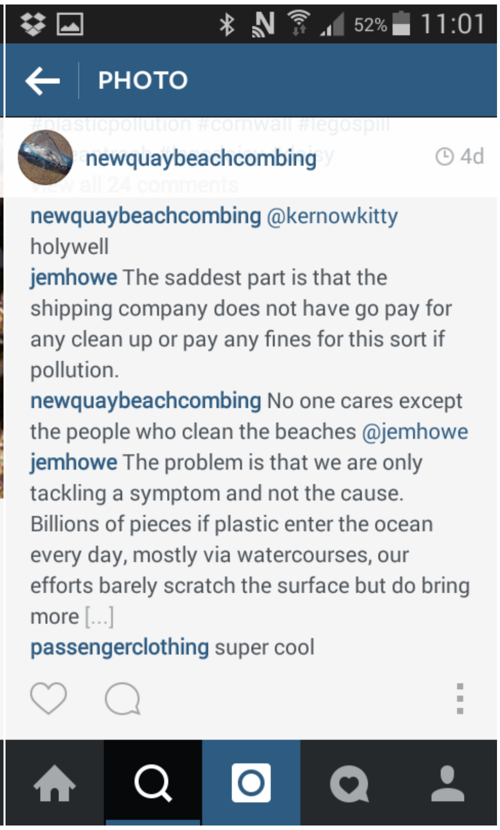


Image 7.19 and 7.20: Image taken by *newquaybeachcombing* and screenshot of discussion about the image.

Image 7.21 and 7.22: Images of reclaimed plastic taken by *newquaybeachcombing* and *2minutebeachclean.*

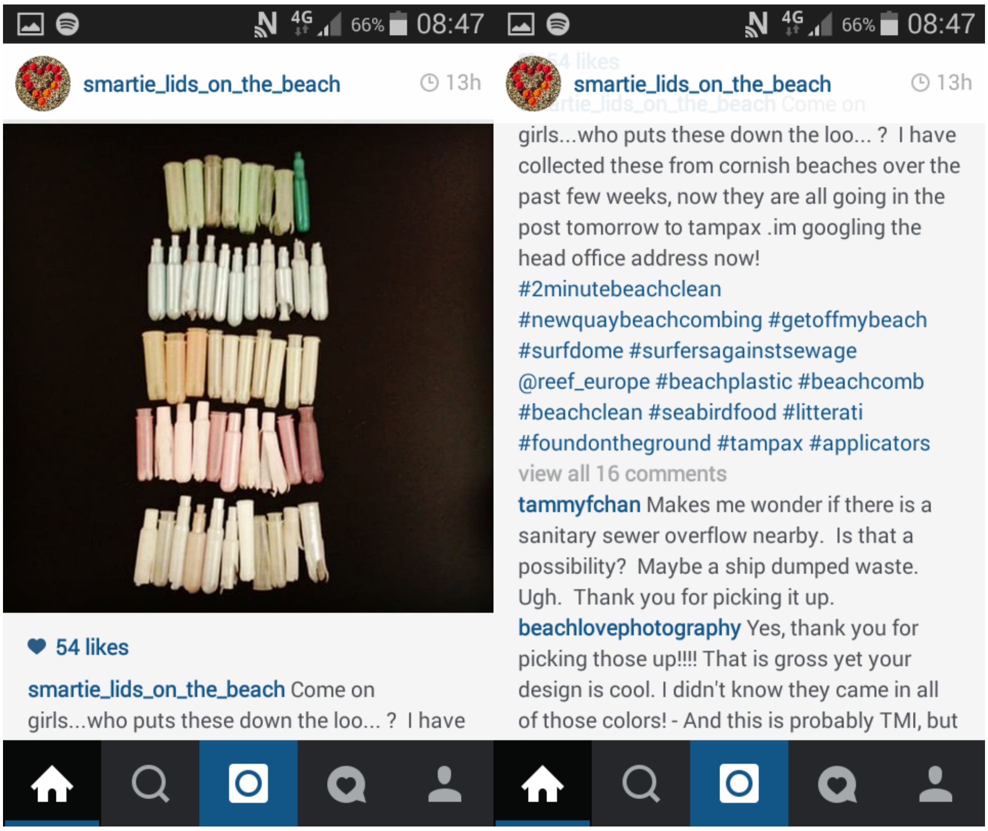


Image 7.23 and 7.24: Image taken by *smartie_lids_on_the_beach* and screenshot of commentary on the image.

Field notes on Images 7.19 – 7.24*: Demonstrations of time through arrangement of items, cleaned, organised and researched. smartie_lids_on_the_beach states plans to send collected tampon applicators found on the beach to Tampax headquarters.*

Image 7.25: *415plumber* describes the time devoted to collection efforts: in this image, 12 years were devoted to collecting the plastic items arranged in the photograph.

These collections and the time devoted to building them, according to Belk (1988), is considered to be an act of self-definition, where the resource of time is not limited to the elite. Building a collection fulfils a sense of completeness and purpose, along with a control over an individual's immediate world. Although Belk (1988) does not specifically use theories from evolutionary or social psychology, he suggests that an innate desire to establish collections stems from the need to ensure future security and survival. As changes in society altered the time devoted to ensuring survival, humans still possess the adaptive mechanism to collect things. These collections, once signalling security and resource wealth, signalled leisure and monetary wealth among a luxury class, and now indicate an abundance of time.

7.5 Reciprocity

The final tactic identified through participant observation is reciprocity. Reciprocity, or 'tit-for-tat' exchanges occur quite often among the Litterati, and is revealed as a critical component to gaining recognition within the group. These exchanges typically entail a 'like for a like', thus increasing the attention given to certain members.

Field notes: *The importance of reciprocity became clear several months after my initial entry into the Litterati. My initial photographs did not garner any attention, nor was I able to build relationship until after I spent a great deal of time liking and commenting on other members' photographs. Although there are certain members that still do not engage in these exchanges, a majority of users do. It is these exchanges that help motivate members to continue taking more photographs, so much so that it almost feels like an obligation. As I spent time observing members, I noticed their absence, or lack of posts, almost as much as their presence.*

7.5.1 Evidence of reciprocity

Gareth (gd4561a):

> Certainly, there seems to be core group of people whom like/comment on my photographs, which I reciprocate. I would say I feel closer to these members than others. I probably feel closer to those whose images/photographs are visually stunning.

Although Gareth is not physically close to other Litterati members (except for Louise (*Louise_dee33*) who know each other personally and professionally, as described in their interviews, he identifies a feeling of closeness, or kinship. The feelings of closeness or kinship are what help motivate him to continue to be part of the Litterati. He goes on to say that the feelings of community give him a sense of empowerment and 'permission' to pick up litter on his own. For David, the reciprocal exchanges instil a sense of 'pressure to behave this way'. This is consistent with my own feelings throughout my experience participating with the Litterati. Combined with the visibility and validation, the underlying pressure associated with reciprocity can only be felt by an insider.

Image 7.26: A screenshot taken after Joe went through my Instagram page and liked several of my photographs.

Image 7.27: Image taken by *415plumber*.

Image 7.28: Image taken by *415plumber.*

***Field notes on Images 7.27 and 7.28**: Exchanges between 415plumber, newquaybeachcombing and smartie_lids_on_the_beach sharing information about what they find. Newquaybeachcombing asks if 415plumber has come across any Lego parts, and 415plumber promises to keep an eye out for them. 415plumber also allows newquaybeachcombing to share Image 7.28. Beyond the aspect of reciprocity being displayed between members in the commentary there is also the demonstration of co-production and the tactic of time in the form of collections. 415plumber appears to be using multiple tactics in a cooperative way, such as time and reciprocity to build status among peers. What has been difficult as far as my analysis is making clear distinctions between the tactics, competitive elements and status strategies. There is a lot of crossover between these components, which is most likely why there has not been a complete theory on status. One could argue that humour is also being used in image 7.28 through the use of slang terms, such as 'wicked' picture, however as mentioned previously humour is subjective and difficult to identify outside of the moment. In the US the term wicked is used to describe something cool or excellent.*

7.5.2 Value of reciprocity

Within the field of economics reciprocity among non-relatives is revealed to be part of a useful strategy for increasing status when participants recognise each other and when there are future opportunities to cooperate (Cummins, 2005). Among the Litterati, favours come in the form of liking and commenting on someone's photograph. The more likes a photograph receives the greater social impact or attention that photograph has within the entire Instagram platform. And so gaining acceptance within this community is achieved through reciprocity; or likes for likes among the Litterati. Belk (2013) refers to this reciprocity as co-creation of the self, where identity and sense of self is validated through mutual liking and commenting; a key goal outlined by Seraj (2012) for entering an online community

7.5.3 Reciprocity and cost signalling

Reciprocity, particularly among non-relatives, is a costly way of signalling the ability to withstand high effort behaviours (Roberts, 1998; Griskevicius et al., 2008). As discussed in section 3.6, reciprocal altruism is a valuable part of group living and survival. Within a group setting, when individuals have the opportunity to cooperate in the future, reciprocity is perceived as a useful tactic to build a valuable reputation (Roberts, 1998). A reputation built through reciprocity signals to others the actor is altruistic and would make a good long-term ally or mate. Given the benefits associated with being perceived as altruistic, individuals will compete via altruism, such as increasing levels of reciprocity to demonstrate the ability to withstand the costs of performing favours (Hardy and Van Vugt, 2006; Griskevicius et al., 2009; Buunk and Massar, 2012). In the case of the Litterati, reciprocity signals time devoted to building relationships and increases the social attention holding potential (SAHP) of the receiver. The SAHP of an individual refers to the level and calibre of attention a person is given by others. Online, increasing levels of attention elevate the overall visibility and status of an individual profile, as a result of reciprocal liking.

Research objective 2 sought to identify how individuals within the Litterati compete for status. To respond to this objective, sections 7.1 thru 7.5 examined the decision rules, or tactics members of the Litterati typically use to achieve higher status. The most observed tactics included visual appeal, humour, time and reciprocity. The next section moves up one level on the model displayed in Figure 7.1 to examine the different methods individuals compete and how those forms of competition may be linked to either Dominance or Prestige.

7.6 Competition and cost signalling

Research objective 3 aims to provide a better understanding of the paths to higher status. While the literature identifies two strategies for achieving status, a closer examination of the four competitive constructs (agonistic competition, cooperative competition, coercive cooperation and copying) helps to clarify whether an individual is using a Dominance strategy or a Prestige strategy for status. Recall, in Chapter 4, the duality of competition was discussed and four competitive constructs were identified. It was further proposed that agonistic competition and coercive cooperation were most likely linked to Dominance, whereas cooperative competition and copying were linked to Prestige. This section will provide evidence to show how each competitive construct is used and perceived by other members. The discussion will link each competitive construct to either Dominance or Prestige.

The tactics, identified in sections 7.1 thru 7.5, function as the currency or units in which individuals can compete. The observed tactics signal costs either in regard to the resources of time, creativity, intelligence and altruism. This is comparable to the examples of status competition and signalling described in section 3.3.3, such as the Kwakiutl whose currency for competition and status was potlatching (Griskevicius et al., 2008); or the leisure class observed by Veblen who was able to compete and demonstrate status through consumption of luxury goods (Veblen, 1899). Within the Litterati members use visual appeal, humour, time or reciprocity as units for competition. The literature suggests within peer settings there are underlying pressures to compete (Russell and Fiske, 2008; Campbell, 2010). The same notion of underlying pressure to compete and perform was present among the Litterati. This inherent competition was expressed in four different ways among the Litterati; agonistic, cooperative, coercive cooperative or copying. This section will examine the four methods in which competition occurs among the Litterati. For instance, Leigh Anne feels pressure to go out and do more when she sees posts from people going out in the snow, to 'keep up with them'. Fred exhibits a discomfort with his low-tech camera on his older smart phone, making him feel like it is difficult to produce more interesting photographs. Competition via these tactics occurs through increasing levels of effort combined with interaction among members. This section identifies how the four competitive constructs exist among the Litterati, with examples of each construct. A more detailed analysis of the nuances of these competitive constructs and their relationship with Dominance and Prestige are discussed in section 7.7.

7.6.1 Direct forms of competition: Agonistic and cooperative competition

Agonistic competition occurs when high levels of costly signals occur, yet there is little to no interaction between members, as demonstrated with *gotcha_106*, *cleandimond* and *maidmerrit.* What makes this form of competition agonistic is the lack of interaction with other members and the lack of reciprocity. Although *gilesthelibrarian* uses humour, s/he only interacts with Jeff and ignores all other members. For instance, although in image 7.12 *gilesthelibrarian* has an exchange with Jeff (*Litterati*), observation of his/her behaviour over time shows that is the only member s/he interacts with. Comments and likes are unreciprocated by *gilesthelibrarian.* Furthermore, the demonstration of time is a strongly competitive tactic for increasing status within the social hierarchy. As indicated in section 7.4.3 and image 7.28, time is a luxury that not many other people can afford. The time it takes to collect, clean, organise and photograph a collection of litter is a very agonistic use of time. The manifestations of time are particularly aggressive in that these posts completely overtake an individual's Instagram feed, as any insider could tell. When an individual floods the Instagram feed, only their posts are visible.

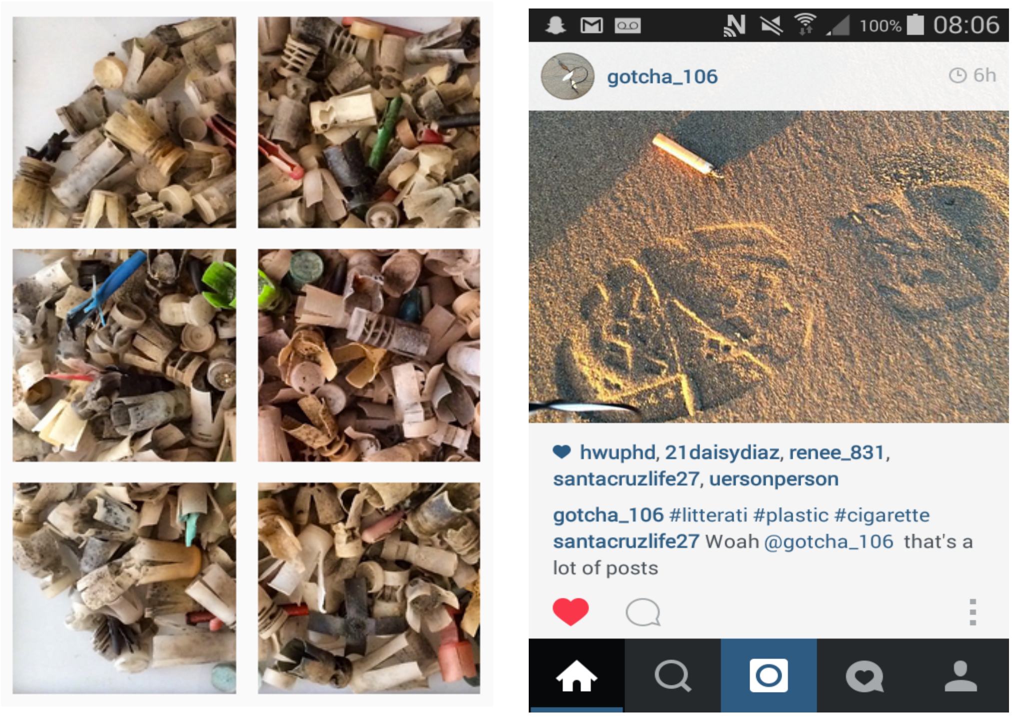


Image 7.29 and repost of Image 7.17: Images taken by *415plumber (right)* and *gotcha_106.*

Competition begins to be cooperative through reciprocity and interaction with other members. The collections posted by *415plumber* are shared and copied. Exchanges in knowledge and likes are out-manoeuvred. For instance, a discussion between Joe and *trashybeach* in image 7.30 shows increasing levels of knowledge regarding the proper disposal of shoes found. There is a constant assessment of place within the ranks among members, and although it is not overt, it is there under the surface. These acts of cooperative competition, which are more frequent than other types of competition among the Litterati, contribute to the success and build attachment within the online community (Ren et al., 2012).

Image 7.30: Competitive cooperation between members sharing knowledge.

7.6.2 Indirect forms of competition: Calculated cooperation and copying

Calculated cooperation is slightly more difficult to identify, especially through visual analysis. The main examples of calculated cooperation is identified within the interviews. Elaine (*RubbishWalksCPM*) mentions her own motives; she wants to create her own app that would be in competition with Litterati however she is much more focused on a local level. She expresses a desire to engage with the community in her own way that is different than her previous work, which was typically driven by the interests of her supervisors. During our interview she asks a lot of questions about the Litterati and how it works, making it appear as though her participation in the interview phase is to find out more about the Litterati.

Elaine (RubbishWalksCPM):

> This is mine and that's quite nice, that I feel like I'm doing something and it's something that I've started.

Joe also reveals his intentions are a form of calculated cooperation. He foresees the Litterati opening the door to economic opportunities to increase his status. The example he gives is making t-shirts with images of his children picking up litter. Joe informs me he wants to find some way to make his Litterati activities into a career, much like the way Jeff has. One idea he had passed along to Jeff was to drive a Litterati-branded bus around the United States to help engage communities to participate in the Litterati.

Joe (plebeianjoe):

> Yes, yes which is perfect and I think there's a lot of really good potential where this could go. I mean it could create; it's a subculture of basically like an economy. You know have branches of people from Litterati that are now branching off into their own areas who are branching off to generate some money for themselves for their community and I think that in probably 5 years or so, it will be really big. I mean right now it's still in its infancy stage.

Elaine and Joe both demonstrate that their cooperation in the Litterati is calculated. They both want to use the activity to increase their socioeconomic status in a calculated way. There is a method behind how they will achieve this status, both of which are individualised to their own goals. For Joe, his own goals are less about being environmentally friendly and more about finding a new way to increase his socioeconomic status. He maintains relationships and increases his cooperation with others in an effort to fulfil his goals for higher status. In the next section Joe's actions will be looked at more closely and linked to Dominance.

Copying is another form of gaining status among the Litterati. It is posited that copying is default behaviour when an individual does not know how to behave (Frank, 1985). In times of uncertainty an individual will look to a high status model, or someone who appears to have better knowledge and imitate them (Henrich and Gil-White, 2001). Frank (1985) elaborates on copying behaviours indicating it stems from a desire to avoid being worse off than those perceived to be inferior. Copying is not a desire to be similar, but to not be outdone, even within a pro-social context (van Baaren, 2004; Hardy and Van Vugt, 2006). Role models are chosen based on the contextual index of 'success' whereby behaviours are copied based on the notion that it will result in some type of benefit, such as higher status (Frank, 1985).

Studies conducted by van Baaren et al., (2004) indicate copying leads to more pro-social behaviours and strengthen social bonds, thus linking copying to a Prestige strategy for status. They conducted several experiments where a confederate mimicked study participants behaviours. The results showed that when the confederate mimicked the participant they were more likely to help the experimenter, when he or she dropped some pens on the floor, or donate funds to a charity.

Image 7.31 shows a photo taken by Fred (*fredmurs*) on the 10th of October 2014. It was chosen the picture of the day and posted on the Litterati Facebook page, with the caption, 'you can always tell a Litterati photo from @*fredmurs*.' A couple weeks later, *maidmerritt* produced an image that has a very similar style to picture *fredmurs* took. This was a shift in *maidmerritt's* normal photographic style, which typically consisted of large volume photos that often appeared blurry. *Maidmerritt's* photo was also chosen as picture of the day on the Litterati Facebook page, thus allowing him or her to not be outdone by *fredmurs*. In this case Fred is a high status model whose style is mimicked frequently, however, despite his influence on other members, he describes a strong feeling of community, further supporting the notion that copying is linked to Prestige.

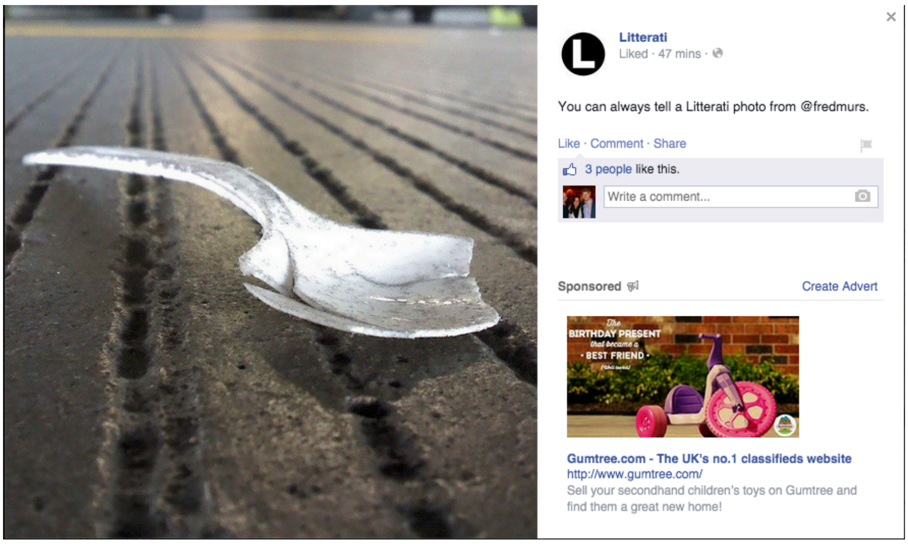


Image 7.31: Image taken by *fredmurs* on 10 October 2014.

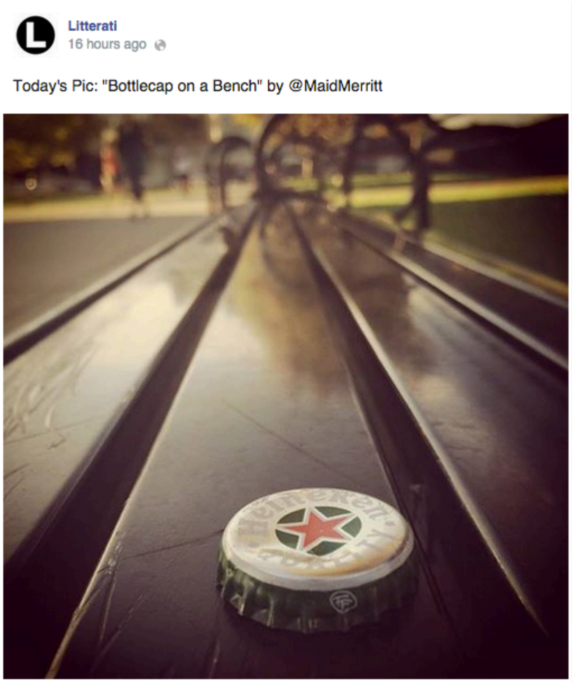


Image 7.32: Image taken by *maidmerritt* on 28 October 2014.

The next series of images shows a progression of photos that hold many of the same characteristics. The three images appear very similar in the positioning of the object and the placement of the horizon. The images appear to become more complex with the different use of light. *Newquaybeachcombing* positions the object straight on and takes the image during midday. *Steinbroh* appears to imitate the same type of positioning but adds complexity to the image by making use of shadow and the position of the sun. Lastly, *_shoot3r* uses the same positioning of the object, but incorporates more of the background scenery to create an image with complexity and more use of colour. The timing of the photographs suggests there was a progressive influence on the members and their photos.

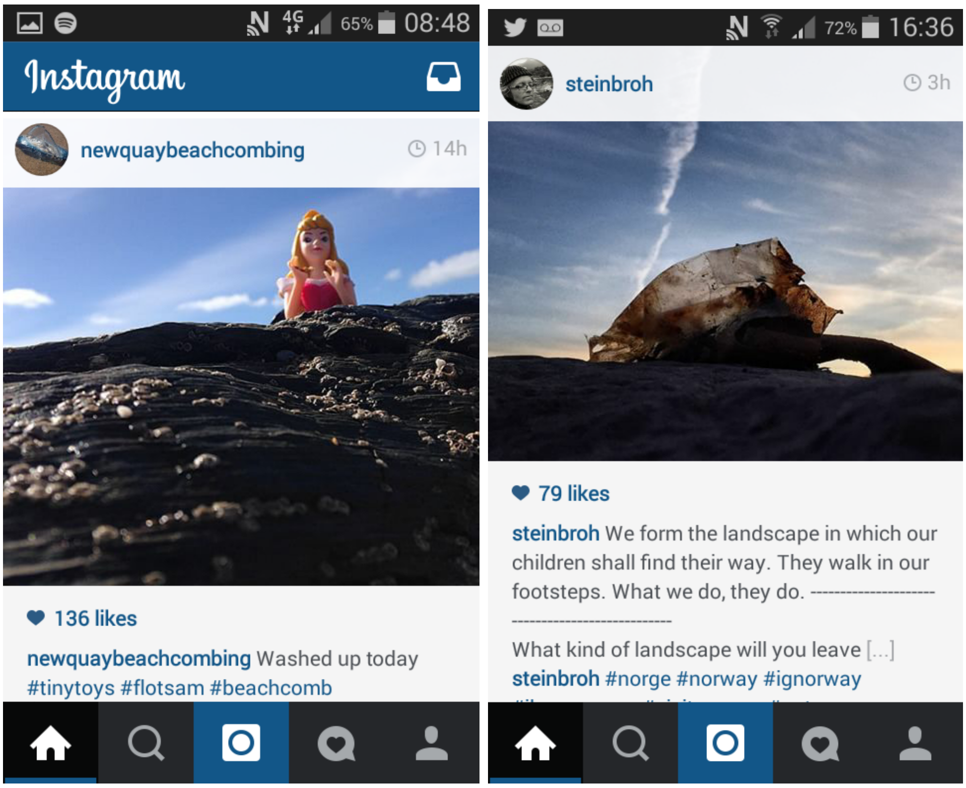


Image 7.33 and 7.34: Image 7.33 taken on 26 March 2015 by *newquaybeachcombing* (UK) and Image 7.34 taken 28 March 2015 taken by *steinbroh* (Norway).

Image 7.35 taken on 30 March 2015 by *_stoot3r* (California).

This section provided evidence of each of the four competitive constructs proposed in this thesis. This research aims to provide a theoretical understanding of the path for achieving higher status. Based on the data collected it appears that a closer look at competition would help to clarify the path for achieving higher status. The four competitive constructs identified and demonstrated in this research clarify this to an extent, however in developing a full theory on status and the path towards higher status, further exploration into competition would be beneficial. The next section will apply further evidence of each competitive construct to either Dominance or Prestige strategy for status.

7.7 Building a theory on status

Buss (2007) suggested a complete theory on status hierarchies should consider the following factors: differences of status striving, subordinate behaviours, equality goals, differentiation among hierarchy types and the different routes to achieving higher status. This research aimed to concentration on one factor listed by Buss (2007), identifying the different routes to achieving higher status. The following section will discuss the theoretical contribution of this research in accordance with Buss's (2007) criteria for providing good theory on status hierarchies. This will be done by also explaining how the research supports the proposed model introduced in Chapter 4.

Upon entry to the group, those that identify with the group will either seek to maintain their status or increase their status. The next section provides examples of both cases by examining the individual experiences of several interviewees. For Joe, Fred and Leigh Anne, they all appear to be trying to increase their status within the Litterati. This is even more apparent after learning about their lives outside the Litterati, where their social status is uncertain or may be perceived as low. The Litterati provides the opportunity to build status within a different social hierarchy and further contributes to perceived self-efficacy and esteem. Comparatively, for David, Nate and Robert, they use the Litterati to help maintain their high status within their community and professions. The examples below support the proposed theoretical model shown in Figure 7.1.

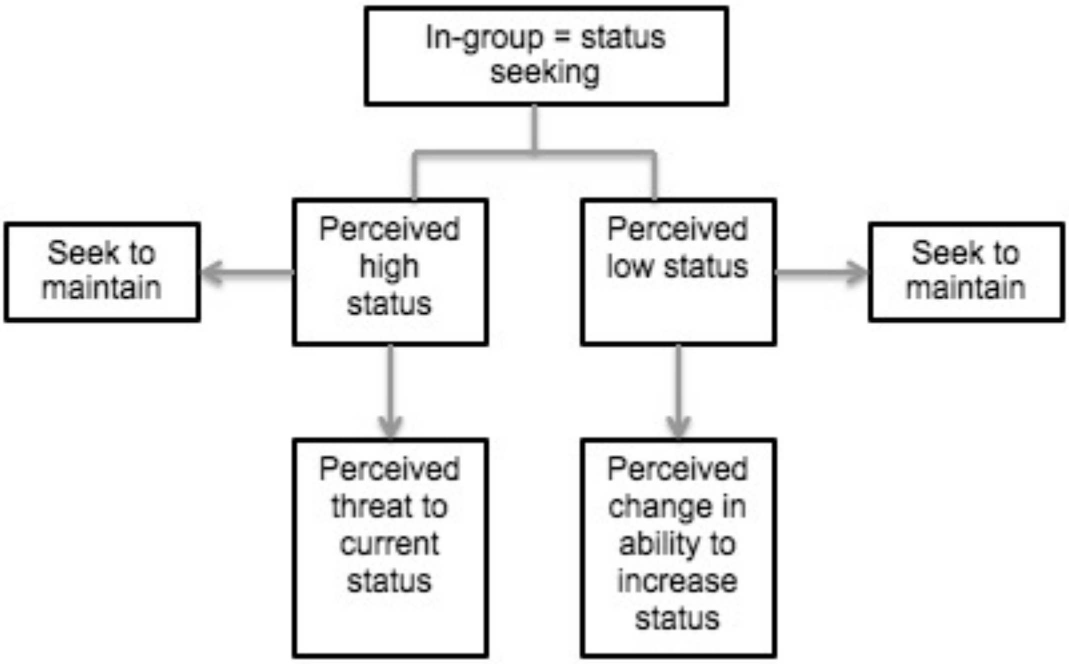


Figure 7.2: Proposed model indicating that when an individual identifies with a group, he or she will either seek to maintain current status, respond to a threat or seek higher status if there is a perceived opportunity to increase status.

A recent study conducted by Ivanic (2015) further supports the findings in this thesis and the proposed model. In the article, Ivanic (Ibid.) found that people reinforcing their status will choose do so without experiencing a threat to status. Thus in the instance a person does not experience a threat to his or her perceived high status, they will still engage in costly behaviours in order to maintain that status. In Ivanic's (Ibid.) study, participants were asked to visit an online retailer's website. The participants were informed they had high status membership on the site and could continue to shop as a Platinum member, however this would result in longer wait times. Individuals that chose to maintain the Platinum member status, despite the 'cost' of longer wait times, reported higher feelings of prestige. Ivanic (Ibid.) further found that high status is not the critical component for perceived higher status; it is the choice to actively reinforce status that results in higher feelings of prestige.

7.7.1 Establishing and maintaining Prestige

Interviewees from the Litterati touch upon similar notions, supporting the theory that high status individuals will engage in costly behaviours to maintain their status (Ivanic, 2015). Both David and Nate discuss this in terms of validation they encounter through participation in the Litterati. They each describe the reinforcement of their leadership roles, roles that are strongly associated with feelings of Prestige:

David (ullafayetteservice)

> So I keep getting professional validation or kudos or money to behave this way, so there's a lot of reinforcement for me. I don't, you know, I'd be interested to know people who don't get that. Telling people that, because for me there's more, there's pressure for me to behave this way and to not stop, to even find additional ways to be involved as part of my work identity, but there is.

David's experience describes continued engagement in costly behaviours in an effort to maintain perceived high status as outlined by Ivanic (2015). Although her research was quantitative and experimental, here is another element that supports the theoretical propositions on understanding the path towards achieving status. David emphasises he receives validation and reinforcement through his work by participating in the Litterati. He values the validation he receives by performing the visible act of picking up litter, which further enhances his reputation at community events, with his students, the organisations he is involved with and his position as dean at a university. That validation is what motivates him to continue in this activity and take on additional tasks, which in turn reinforces his status and identity.

Robert, another high status individual, has been actively involved in community preservation groups for some time, even taking on leadership roles within these groups and has been slowly adopting higher-effort pro-environmental behaviours, such as getting rid of his car. Robert is well established within the community, given the types of activities and roles he has held in the past. As far as his involvement with Litterati, he is still unsure of the benefit of maintaining the costly behaviour, however, he does value the visibility it provides:

Robert (walthersonlitter):

> I was taking pictures just walking from the house to the bus stop and back for about a month. And the amount that'd show up on that map on the Litterati website is just enormous. It was, I think, the latest amount, that shows that for the couple of blocks that I walk it's over 100 pieces. I know that. Just dots lining the entire street. So that's kind of you know, it's a way to show people, you know, the effect of litter on their neighbourhood. And how, you know, the benefit one person can have trying to, you know, clean up and the more people that participate, the more work gets done. I

> brought up the map and showed it to someone in the neighbourhood and said this was two weeks of walking to the bus and back and how much litter was on this street and everything.

For Robert, and for other members as well, making these behaviours visible to others is a critical component to increasing the uptake of these behaviours. Visibility reinforces feelings of prestige[4] and status, thus encouraging greater involvement in higher effort behaviours. Prior to the advent of the Internet and social media, visibility was reliant upon physical proximity and appearance (Thompson, 2005). Now, visibility and thus the opportunity to build status, no longer relies on co-presence. Status via Prestige may be built and maintained through the careful construction of images and text selectively shared with wider audiences on public platforms such as Instagram. This careful construction of reputation utilises a variety of behaviours or tactics under a larger subconscious strategy, where competition occurs through cooperation.

7.7.2 Demonstrating Dominance

As previously discussed, the tactic of displaying time is used in multiple ways as a means of garnering attention. One of those ways is to use time to produce a high volume of images. For instance, *gotcha_106* joined the Litterati a few months ago and has consistently bombarded the Litterati Instagram feed with photographs, sometimes up to 100 per day. This type of behaviour not only signals the cost of time, but it is a very agonistic form of competition. This is a very in-your-face tactic, characteristic of Dominance. Those that participate in Litterati this way do not acquire many comments or likes, yet other members are always aware of them.

Nate (swlrp):

> Then there's a bunch of others that just by their sheer volume are kind of always present.

Many of these high-volume posters (*maidmerritt, litterfighter, cleandimond*) are dismissive and ignore comments by others. They do appear to have status, and social attention, in the sense others follow them and are aware of them, as mentioned in

[4] Lowercase is used here to differentiate between feelings of prestige and Prestige status.

interviews. However in interviews when these members are discussed they are described as ‘always there’ but interviewees cannot recall their names, compared *janisselbyjones* or *fredmurs* who are well known within the community for producing visually stunning photographs. Meanwhile the high-volume posters, although noticed, they are avoided, much like when a subordinate avoids a Dominant, high-status individual. Time is a resource that is very difficult for others to replicate, yet it spurs competition and demonstrates Dominance, despite the act of picking up litter being a pro-social activity. For Leigh Anne, the demonstration of time by others encourages her to become more competitive. She describes how this motivates her to pick up more litter.

Leigh Anne (3moonsstudio):

> I would never think to go out in the winter but I see people like posting, and all these people, I don't know their names on Instagram. So I'm like, oh they’re out, I see snow on the ground, I should get out there, like, and I did litter pick-ups in February, which I have never done in the past.

In another part of the interview Leigh Anne mentions feelings of jealousy over other people’s posts. Leigh Anne attributes these feelings over the quality and uniqueness of the litter other people photograph, especially those living in coastal areas. Determined to overcome these feelings of jealousy and demonstrate higher levels of status, but within her time and location constraints, she reveals a plan to adjust her behaviour. To become more competitive she takes photographs of the bags full of litter she collects. She also signals higher status by posting a picture of a highway she adopted with a former partner. This is Leigh Anne’s form of peacocking; it is these variations in resource wealth that signal to other Litterati members her ability to be pro-social. Although she may have a status that is viewed as Prestigious, her process of achieving that status is Dominance-driven, displaying qualities of agonistic competition. This highlights a point made by Henrich and Gil-White (2001): that resulting status and the process of achieving status can be quite different; an individual may be perceived as a Prestigious individual, however, the process of acquiring that status may be aggressive, competitive and fear-inducing.

Image 7.36 and Image 7.37: Image and commentary on photo taken by *3moonsstudio.*

Image 7.38: Image taken by *3moonsstudio.*

Field notes on Images 7.36– 7.38*: Images taken by Leigh Anne to quickly demonstrate her devotion to litter abatement activities and her high status.*

7.7.3 Demonstrating Dominance and Prestige

Joe appears to demonstrate both Dominance and Prestige. For Joe, Litterati is a daily activity, something he does when he is walking to and from work, or walking around the neighbourhood with his children. To him, the Litterati is the beginning of a social movement, something greater than ourselves that we are all contributing to. He works tirelessly on spreading the word of Litterati. He looks at his surroundings and the litter at the nearby college campus and finds disappointment among the people he deems to be the future leaders of the world. College students, to him, embody the best and the brightest the United States has to offer. Yet, perhaps he is placing too much responsibility on these still-developing minds. While Joe works as a nurse, a recognised profession, he views the doctors he works with in much higher regard, taking note of their behaviours and copying them.

Joe (plebeianjoe):

> I think I tried to do what smart people around me did that was effective and that was, um, you know, like I watched what doctors ate versus what nurses ate. I watched what healthy people would do, if they would take the stairs versus taking elevators. I just like to watch people really. I'm that bearded creeper that drives a minivan that analyses what people do. And what makes them successful.

Beyond copying high status models, such as the doctors he works with, Joe describes his involvement in many types of organisations with good causes, he seems to want to be cooperative, and is altruistic in many aspects of his life. He has a history of church involvement; he once started a non-profit to raise funds for cancer patients, and his work as a nurse indicates an altruistically motivated individual. A pattern in Joe's history shows he regularly gets frustrated with the organisations he joins. He describes feelings of hypocrisy in the church, outgrowing the non-profit he helped to start and disintegration within the US healthcare system. These frustrations could be attributed to loss in status, social identity and ultimately lead to disassociation stemming from threat to existing high status (White and Dahl, 2007; Marr and Insead, 2014). If Joe reaches a certain level of status or perceives a threat or loss to his high status within these organisations, his core identity is threatened (Marr and Insead, 2014). In an effort to reclaim status and identity he disassociates with the group and chooses to move on in hopes of elevating his status amongst a new peer group (White and Dahl, 2007). For the moment, Litterati appears to fulfil aspects of Joe's desire for status and core identity.

An analysis of his photographs over time reveals a combination of tactics, visual appeal, humour and time, mainly copied from others, in an effort to gain recognition among the Litterati. He actively sought out Jeff, founder of the Litterati, and communicates with him regularly in order to get more involved with the organisation. When asked about his motivation for participating in Litterati, for Joe, it is less about caring for the environment and more about gaining status, without going overboard, or being too extreme.

Joe appears consciously strategic in his actions – incorporating multiple tactics – and it appears his behavioural strategy oscillates between Dominance and Prestige, based on the environmental cues. This extends beyond his own statement of copying high-status others, to his maintained presence within the Litterati Instagram feed. Joe devotes a great deal of time not only to producing photographs that incorporate the style of other members, but also in building and maintaining relationships. My own experience with him is that he is typically the first Litterati member to like my posts, (recall image 7.26).

In the images below (7.39 – 7.46) Joe copies and then outperforms high-status others. During our interview he comments on his copying, stating that he watched what people 'smarter than him' were doing so he could be more like them. Comparing this to his actions within the Litterati, this is reaffirmed in the observational data as he copies the photographic styles of certain people he admires. Joe's behaviour is consistent with the theory on Prestige posted by Henrich and Gil-White (2001). Yet it is further observed that Joe tries to aggressively outperform them, which is consistent with Dominance (images 7.40 – 7.46). In the virtual world, where social hierarchies are more spread out and individuals rarely meet face to face, status is achieved through attention holding. This is consistent with the theory discussed in section 3.3.1, called resource-holding potential. Resource-holding potential introduces the notion that nonhuman animals assess their own strengths and weaknesses relative to others (Buss, 2007). This theory applied to humans, is another example of social attention-holding theory (SAHP) discussed in section 3.3.1 (Gilbert, 1990 cited in Buss, 2007). This theory suggests humans will compete with each other for attention among a group. Although many interviewees appear to conduct these assessments subconsciously, Joe appears to be aware of this behaviour. His awareness is consistent with the previous assessment that he competes for status using calculated cooperation. One comment Joe makes during our interview accentuates this point.

Joe (plebeianjoe):

> When I first started Litterati I thought Fred was the shit, like I thought he was awesome.

In the comment Joe makes above, he uses the past tense. Fred had a style Joe had admired in the beginning, upon his entry into the new group. Over time, however, Joe was able to develop his skills and possibly perceive himself to be as good or better than Fred at taking photos. Simultaneously, there was a marked decline in the number of posts by Fred.

What is observed over time is that not only does Joe repeatedly like Fred's photographs, but also he incorporates aspects of Fred's style into his own, which is seen in images 7.39 and 7.40. Again, this behaviour is consistent with theories on Prestige and copying (Henrich and Gil-White, 2001). Another example is the photograph posted by *thewhiskeydude* (image 7.41). Joe compliments the style and then runs with it over several weeks. Not only did his images evolve in the visual aspects but also in the frequency of his postings. He posts much more frequently than Fred and *thewhiskeydude*.

In interviewing and observing Joe, a pattern arises; Joe gains initial entry within the new community, gains acceptance, then utilises the tactics deemed appropriate by group norms to navigate his way up the ranks. In the year of following him on Instagram he has started multiple Instagram accounts; he regularly gets picked for the Litterati photograph of the day and is frequently noticed by other members. It could be argued that based on the attention he holds from other members; Joe has successfully gained high status using tactics under both Dominance and Prestige strategies. The process is achieved through competition, copying and cooperation, however, the result is a Prestigious status. His actions are consistent with the existing theories on the two strategies for status identified by Henrich and Gil-White (2001) and Cheng et al. (2013), however, Joe appears to alter his strategy based on environmental cues such as the behaviour of others. Maintaining his status is reliant upon the alliances he has built, where continued interaction and reciprocity are crucial, as described by Cummins (2005), thus further highlighting the use of both strategies for increasing and maintaining status.

Image 7.39: Taken by *plebeianjoe.*

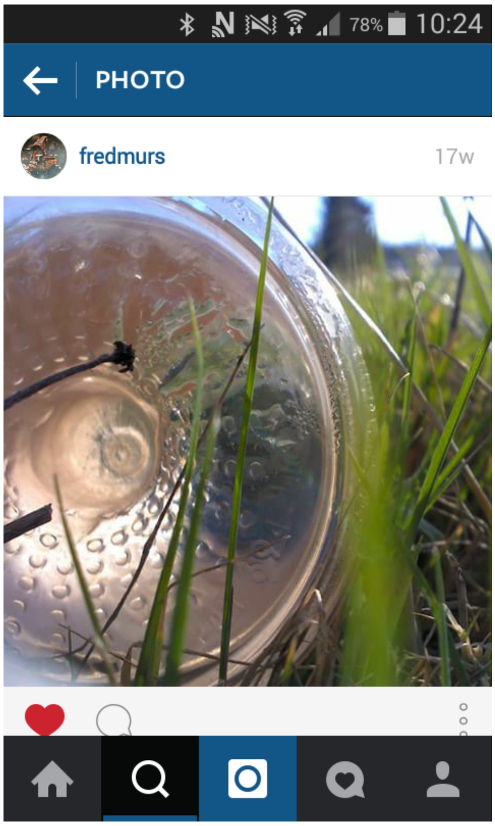


Image 7.40: Taken by *fredmurs.*

***Field notes on Images 7.39 and 7.40**: Side by side comparison of a photograph by plebeianjoe compared to a photograph by fredmurs posted at an earlier date.*

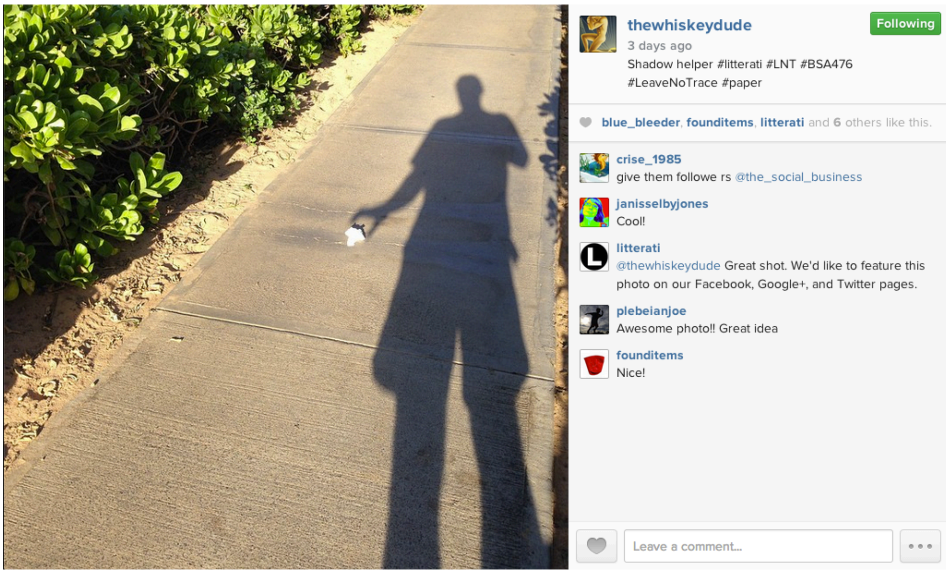


Image 7.41: Taken by *thewhiskeydude,* who posted a photograph using a shadow in early November. It receives comments from Litterati and *janisselbyjones*, (both high status) and *plebeianjoe* comments on how the style is a great idea.

Image 7.42: Taken by *plebeianjoe.*

Image 7.43: Taken by *plebeianjoe.*

Image 7.44: Taken by *plebeianjoe.*

Image 7.45: Taken by *plebeianjoe.*

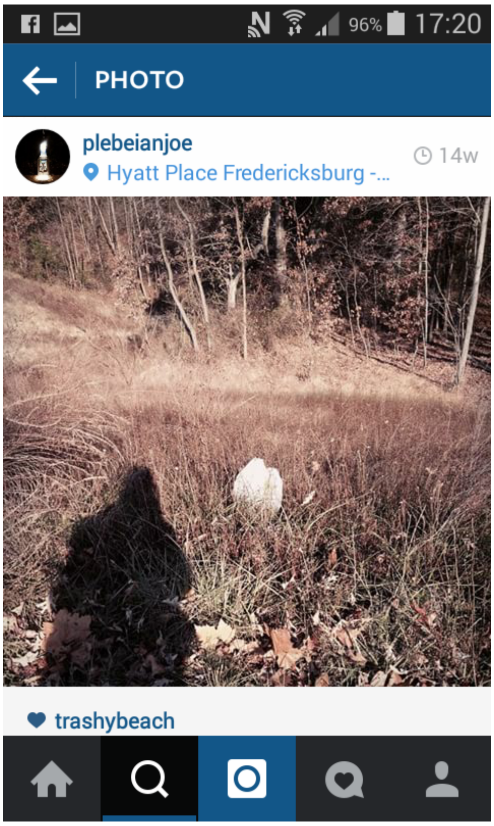


Image 7.46: Taken by *plebeianjoe.*

Field notes on Images 7.42 – 7.46*: Several images posted by Joe (plebeianjoe) outperforming thewhiskeydude, using the same style repeatedly over a period of several weeks (mid-November through to early December).*

Further analysis of Joe's observed behaviours and interview reveals ulterior motives, supporting the notion his strategy alternates between Dominance and Prestige and his cooperation is calculated. He admires Jeff and the work he has done to point of demonstrating fanaticism, but Jeff also serves as a high status model to be copied and outperformed. Based on his description of his interactions with Jeff, it seems he is using favours to learn more about the Litterati in hopes of breaking away to start his own version of Litterati. In his work as a nurse he feels he has gone as far as he can go as far as status, he describes the US healthcare system as broken and feels it is a lost cause. Litterati, according to Joe, provides an opportunity to make a name for himself and be at the forefront of what he perceives to be a revolution.

Joe (plebeianjoe):

> Hey look I'm out here doing it, I have picture proof that I'm out here picking up trash and you can do it too. I am just a normal everyday guy who's frustrated with the way the world is and wants to change it. I think it's kind of cool, to know maybe thinking that one day my kid will say, you know, my dad was one of ones that led this movement.

These observations suggest that perhaps Dominance and Prestige are not separate constructs, but possibly, polar ends of a continuum, where an individual's strategy adjusts based on social and environmental cues.

Proposition 1

> Dominance and Prestige are the two distinct and separate strategies for achieving status.

Thus, it is in response to proposition 1, Dominance and Prestige do not appear to be separate and distinct strategies for status. Instead they may appear to be a polarised scale, where an individual may utilise a Dominance (Prestige) strategy based on environmental cues, the level of visibility and perceived self-efficacy. It is however, difficult at this time to predict the strategy a person will use before entering into a new peer group. What does appear to be distinct is *how* people compete for status via the four competitive constructs identified in the literature, where visibility of behaviour and possibly the level of self-efficacy impact the type of competitive construct used.

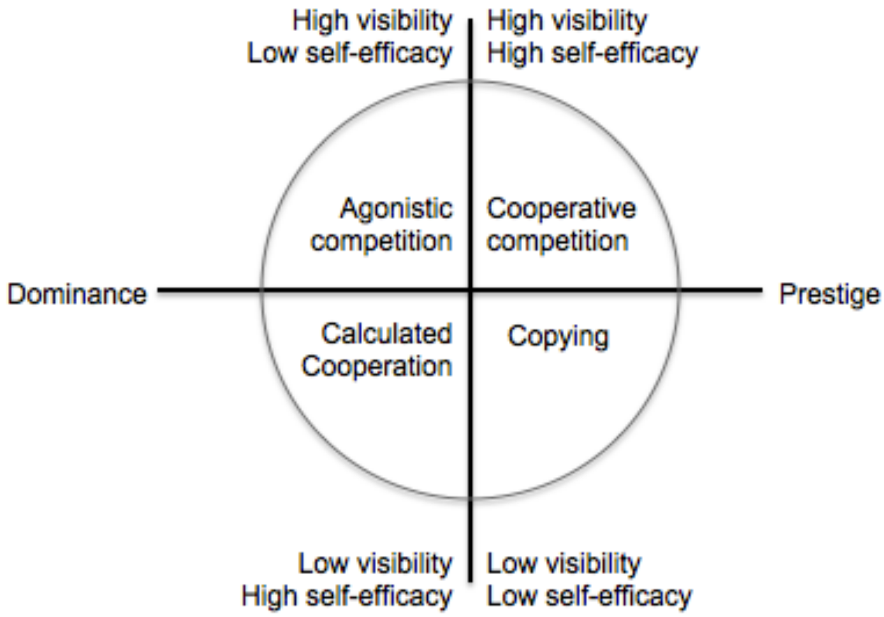


Figure 7.3: Updated proposed model for status strategy decisions.

Proposition 2a and 2b

Agonistic competition and coercive cooperation are linked to Dominance.

Cooperative competition and copying are linked to Prestige.

Propositions 2a and 2b propose a theoretical link between agonistic competition and calculated cooperation to Dominance and cooperative competition and copying to Prestige. Henrich and Gil-White (2001) make the distinction between the process for acquiring status and the resulting status, such that an individual could use a Dominance strategy and end up with a Prestige status. Based on the data collected for this research the competitive constructs used, the strategy used and the resulting status may be impacted by perceived self-efficacy and visibility. For instance, when Leigh Anne had low visibility she resorted to agonistic competition by posting a different style of images to gain more status. This included images of bin bags full of litter she collected and her 'Adopt a Highway' sign. Based on the data collected it appears visibility as well as self-efficacy contributes significantly to the type of competitive construct an individual chooses to use. As a means of summarising how the path for achieving higher status could look, using the model in Figure 7.2 as a guide, the Table 7.1 has been created.

The table first considers the factors of visibility and self-efficacy from the model in Figure 7.2 and how that may impact the competitive construct used, under a either Dominance or Prestige. To further clarify the distinction between strategy for status and resulting status, which the literature often confuses, it is suggested here that resulting status should be rephrased according to the level of social attention holding potential (SAHP). Direct forms of competition, such as cooperative competition and agonistic competition may result in high levels of SAHP. Conversely, individuals using indirect forms of competition, such as copying and coercive cooperation may lead to low levels of SAHP. Viewing status in this manner suggests future research may explore whether or not SAHP could be broken down further into types of SAHP, as opposed to just Dominance or Prestige.

Self-efficacy	**Visibility**	**Competitive construct**	**Strategy used**	**Resulting SAHP**
High	High	Cooperative competition	Prestige	High
Low	High	Agonistic competition	Dominance	High
High	Low	Calculated cooperation	Dominance	Low
Low	Low	Copying	Prestige	Low

Table 7.1 Potential paths to higher status.

Proposition 3

> Self-efficacy and environmental conditions influence status-driven behavioural decisions.

Perceived self-efficacy is thought to contribute to behavioural decisions. From the qualitative data self-efficacy emerged as a significant pattern through analysis of the interviews. To ensure triangulation, self-efficacy was measured quantitatively among the Litterati. However, it is still unclear how self-efficacy impacts status strategy decisions. In other words, individual differences may help in predicting whether a Dominance or Prestige strategy will be used, as suggested by Cheng et al. (2010; 2012), however it may not indicate whether an individual will use direct or indirect forms of competition. The GSE scale used in this thesis measured perceived self-efficacy; it was chosen based on its ability to reflect the motivation to undertake new behaviours in general as opposed to a specific behaviour (Chen et al., 2001). All of the interviewees had a GSE within the range of 27-37, suggesting in general this group is apt to take on new types of behaviours. The scale does not predict the motivation to engage in different types of behaviours, such as the different competitive constructs identified in the literature. Building upon the discussion from Section 6.3.1 further investigation is needed to determine specifically how self-efficacy or self-esteem impacts the decision to use one strategy or competitive construct over another as opposed to considering general perceived self-efficacy.

Proposition 4

The proposed model may be used to explain and predict status-driven behaviour.

The culmination of the data from this research indicates that the first part of the proposed model is correct. When an individual identifies with the group, he or she will engage in costly behaviours to either maintain status or achieve higher status. Individuals appear to be more likely to engage in status-seeking behaviours when perceived self-efficacy is high and the behaviour is visible. This may include the use of agonistic competition, cooperative competition or calculated cooperation. The overall strategy for status alternates between Dominance and Prestige based on environmental cues, such as interactions within the community. Thus, it would appear that the diagram in Figure 7.1 is a better representation of the process for seeking status compared to the model originally proposed in Chapter 4. Applying this to the practice of increasing pro-environmental behaviours, marketing professionals and policy makers could create group specific messages, which activate status seeking or maintenance behaviours.

7.8 Critical realist view on the Litterati

The fourth research objective applies critical realism to the observed events of this research. This objective aims to evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community. To do this, the data must be evaluated at the three levels identified within critical realism: the empirical level, the actual level and the real level.

At the empirical level, observed events occur within the social field. Warde (2004) describes the social field, or community as a game, 'wherein agents adopt strategies in competition with others to gain the stakes' (p. 12). He goes on to state that although individual conduct is always strategic, the use of strategy is often an unconscious practice. That said, within the confines of the Litterati community, individuals appear to be constantly assessing where they stand in comparison to other members, and seeking out different methods for acquiring status in accordance with the norms established within the community. As individuals engage in the identified tactics to compete for status, as explained through cost signalling theory, a deeper explanation of the broader strategy for status is required. In response to research objective 4, the causal tendencies between tactics, competition and strategy may be summed in the following diagram, Figure 7.3:

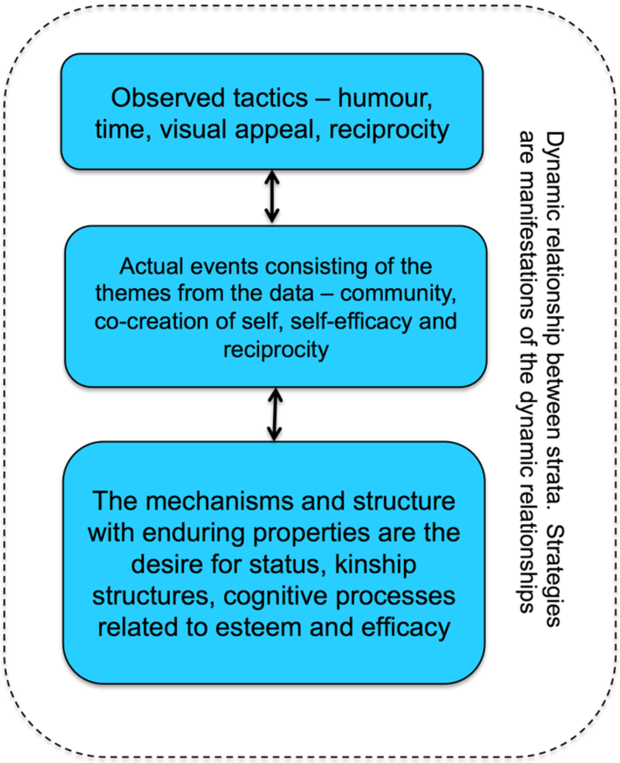


Figure 7.4: Stratified, summary view of the findings adhering to the critical realist perspective.

Consistent with the critical realist perspective, the observed tactics identified earlier in the chapter comprise the empirical or observable level events. The observed tactics, visual appeal, humour, time and reciprocity are shaped and acted upon by the prevailing themes from the data. These themes consist of community, identity, and self-efficacy make up the actual events, or the factors that are not wholly observable. The underlying structures, with enduring properties, are explained by the evolutionary theories of kinship structures, universal desire for status and the cognitive processes associated with self-efficacy and self-esteem. These three events, observable, partially observable and unobservable structures are dynamic and changing in response to environmental cues. The strategies people choose to use for status are a manifestation of the relationship between strata, within the critical realist stratified view of reality.

7.8.1 Putting theory into practice

The literature reviewed in Chapter 2 discussed the use of models based on rational choice theory to develop strategies for social marketing of PEBS. The most widely used model in developing social marketing for PEBs is the Theory of Planned

Behaviour (TPB). The literature presented in Chapter 2 indicated the use of this type of model for encouraging PEBs has had limited successes. This combined with McDonagh and Prothero's (2014) review of sustainable marketing literature indicated the field of marketing needs to change its strategies to promote widespread change in human consumption.

As the field of sustainable marketing seeks to understand and change consumption in a way that promotes environmental protection and conservation, a greater understanding of the motivations to engage in such behaviour was required. Furthermore, it has been suggested a change in the way this type of behaviour is marketed to individuals is required to achieve the goals necessary to mitigate climate change. The previous section described a stratified view of reality as observed among the Litterati, a group of pro-environmental behaviourists. The underlying structures suggest status competition is fuelled by a desire to achieve high social attention holding potential motivates behaviour, while internal controls such as self-efficacy facilitate this behaviour. Applying the next level elements such as community and co-creation, marketers may be able to create other communities that drive observable forms of PEBs, such as those experienced among the Litterati.

The forum provided by the Litterati enables members to engage in 'communicative action', where discussion of social change and interaction evokes a feeling of passive activism among the Litterati (Scaraboto and Fischer, 2013, p. 1244). In their survey of perceived benefits from participation in online ethical communities of consumption Gummerus et al. (2015) shows that users need to have a high-perceived benefit to media use in order to change their behaviour. The Litterati achieves this by creating opportunities for status, a universal desire, proposed by the conceptual framework in this thesis.

7.9 Chapter summary

This chapter explained the main themes expressed within the Litterati community along with the most useful tactics for increasing status in terms of cost signalling theory. The data presented from this ethnography of Litterati suggests that individuals adjust their strategy for status based on a combination of internal cognitive factors, such as self-efficacy and perceived status, as well as social and environmental cues. Although the observed empirical events suggests status among the Litterati is Prestige driven, the underlying process of achieving that status could be either Dominance or Prestige. The findings were presented in a reflexive manner following the suggestion from Barron (2013). Barron (2103) indicated that removing reflexivity from his thesis prohibited him from producing a multidimensional analysis of his data, which is what critical realism seeks to do. The following chapter will provide a summary of the thesis and respond to research objective 5.

Chapter 8: Conclusions

8.1 Thesis summary

Recognising the role marketing has in the relationship between consumption and the environment, recent work within the field of marketing has called for a transformation of marketing strategies, to incorporate sustainability at its core (McDonagh and Prothero, 2014). Efforts to increase the focus on sustainability within the field of marketing, starting in the 1970s until today, have improved; however, given the continued rise in climate-related issues it is apparent that a systematic change is necessary to change human consumption. Research on consumer behaviour has explored theories on social identity (Tajfel and Turner, 1979), planned behaviour (Ajzen, 1991) and values-beliefs-norms (Stern, 2000). These theories have shed light on short-term motivations for increasing pro-environmental behaviours, however, there is limited evidence of long-term behaviour change when applying these theories to practice. Additional research has explored the use of normative messaging in engaging sustainable behaviours such as towel reuse during hotel stays (Goldstein et al., 2008), or decreasing home energy use (Schultz et al., 2006) as discussed in Chapter 2. In order to find more effective methods for understanding, and possibly increasing, pro-environmental behaviour, this research used the conceptual framework of evolutionary psychology, thus making this research consistent with advances in sustainability-related marketing research.

This research aimed to answer the following overall question: To what extent can cost signalling theory and the universal desire for status help transform extant marketing strategies to explain *how* and *why* people engage in pro-environmental behaviour as a means of changing consumption?

The second chapter examined the strengths and weaknesses of extant marketing strategies in encouraging pro-environmental behaviours, suggesting the current literature lacks a cohesive model, which can effectively encourage long-term behaviour change. A further review of the literature indicated the relationship between status and consumption along with the relationship between status and PEBs could be an effective method for encouraging long-term changes in consumption that help protect the environment. The data collected from this research indicated that status motives, combined with perceived validation through visibility, high-perceived self-efficacy and strong feelings of community lead to an increase in PEBs. This extends to higher-level behaviours such as changes in product choice and home production of personal care products. Applying this model to existing tools of marketing communications could lead to increased and long-term changes in PEBs, with consideration for how people navigate social hierarchies.

As people navigate social hierarchies there is a desire to appear more socially desirable or more pro-social to others (Carrington et al., 2010; Griskevicius et al., 2012). It is argued here that status-seeking behaviour is activated when an individual firstly identifies with a specific peer group. If the individual does identify with the group, depending on their current status and the presence of threat to status, or the opportunity to increase status, the individual may or may not engage in status-seeking behaviour. For example, a high-status individual may engage in costly behaviour to maintain his or her current status, even in the absence of a threat. A high-status individual may perceive a threat to current status and engage in costly behaviour to overcome that threat and maintain his or her current status. Lastly, a low-status individual may see an opportunity to increase his or her status by engaging in costly behaviour. From that stand point the individual decides upon the manner in which to increase his or her status via a competitive construct. Competitive constructs are thought to consist of agonistic competition, coercive cooperation, cooperative competition and copying. The decision to engage in a specific competitive construct is driven by a longer-term strategy of either Dominance or Prestige. An individual may compete using a variety of tactics shaped by norms, under either strategy.

To explore the validity of the proposed model a netnography was carried out within the Instagram community of pro-environmentalists called the Litterati. The netnography, combined with semi-structured interviews, explored how individuals used either Dominance or Prestige to achieve higher status among the Litterati. These methods were also used to identify the tactics shown to be most useful to navigate social hierarchies among the Litterati. Several of these were established *a priori* and included time, humour, reciprocity and visual appeal. These *a priori* tactics were validated through participant observation. The semi-structured interviews involved 13 volunteers from the United States and the United Kingdom, as well as the founder of the Litterati, Jeff Kirschner. The interviews also led to the identification of several important themes, which further shape the tactics used and behavioural rules within the community. The findings provided support for this model and are summarised below in response to the research objectives.

8.2 Key findings

Considering the critical realist perspective, the findings may be summarised as follows: at the empirical level, the events actually observed are the observed tactics discussed in the previous section. These include time, visual appeal, humour and reciprocity. Beyond the events that are wholly observable are the actual events generated by the mechanisms and structures. The actual events are the emergent themes from the data such as community, co-creation of self and self-efficacy. Applying theories from broader marketing theory and Consumer Culture Theory facilitates the explanation of the events at the actual level. The theories from evolutionary psychology, such as the universal desire for status, cost signalling theory and kinship structures, identify and explain the underlying structures with enduring properties. This stratified relationship of reality reveals a dynamic reactionary process between levels. The strategies for achieving status are manifestations of the dynamic, changing relationship between events.

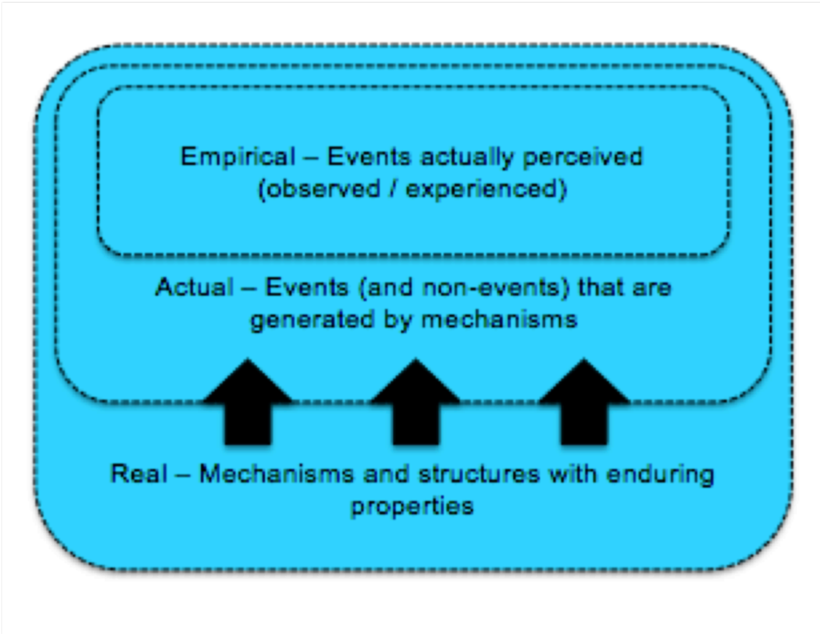


Figure 8.1: Visualisation of the stratified view of reality according to critical realism.

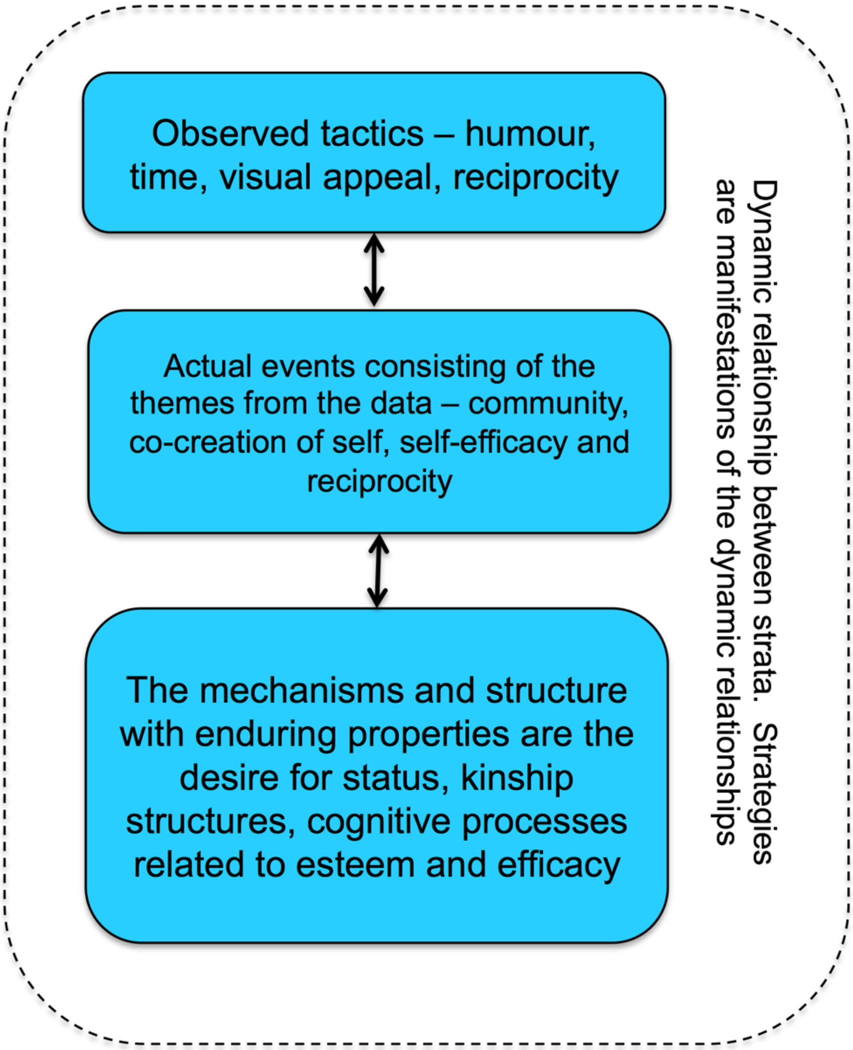


Figure 8.2: Summary of the findings from this research presented according to the critical realist stratified view of reality.

The research did have specific aims to fulfil, however, incorporating theoretical sensitivity into the methods maintained an open approach for additional themes to emerge. The key themes, which arose from the data, included community synchronisation, co-creation of the self and self-efficacy. Based on existing theory, both the charismatic leadership and community synchrony helped to shape the types of useful tactics for achieving status. These in turn are thought to enhance feelings of self-efficacy necessary to promote social change. Additionally, the findings suggest that Dominance and Prestige may not be two completely divergent factors. There is some indication they should be measured on a sliding scale, where an individual alters his or her level of Dominance or Prestige in response to changes in the environment, threat to status and perceived ability to change or maintain status.

The overall research aim of this thesis, as stated in chapter 1, is to build upon the existing evolutionary psychology theory of status by exploring how individuals use tactics identified through cost signalling theory, such as pro-environmental behaviour, humour or time, in order to gain social status within a peer group. This research indicates that individuals use a variety of tactics to achieve higher status within a peer group. In line with the main research aim, the five research objectives outlined in Chapter 1 are addressed below.

1. *Research objective 1: To identify patterns, which shape behavioural decisions, such as self-efficacy, against displays of Dominance or Prestige among Litterati members*.

Although the literature suggests the decision to seek or maintain status is reliant upon individual factors such as perceived ability, resources, threat to status and personality, this research finds that self-efficacy is the most prevalent contributing factor in the decision to seek or maintain status. However, there should be more research into this, possibly considering the methodological implications described by Hawley (2011), where individual scales could prove to be useful in examining the duality of competition. There should be further consideration of the relationship between self-efficacy and self-esteem, where there is a lack of clarity in the contribution each cognitive factor has in the decision-making process for seeking status. This relates to aspects of competition as well. There are numerous scales available for measuring esteem, self-efficacy and competition. Exploration of these factors with regard to status would benefit from in-depth research and analysis, both qualitatively and quantitatively. This could be applied to behaviours such as involvement in the Litterati, or other ethical or sustainable, focused types of behaviours.

Making the links from these observed behaviours back to evolutionary psychology, it is very clear that Litterati behaviour is the performance of altruism, but the core motivation, what keeps people coming back to it, is self-interest. As people like Joe, Fred and Leigh Anne struggle to find a place, or status, within their existing environments, Litterati provides them an outlet where they can quite easily achieve that, particularly within a group they identify with.

2. *Research objective 2: To explore how people compete for higher status within an online community called the Litterati, a subculture of pro-environmental behaviourists.*

This research reveals that multiple tactics may be used to achieve higher status under either a Dominance or Prestige strategy. The tactics may be used competitively, cooperatively or they may be copied. The factors or themes that suggest an individual may decide to engage in status seeking or maintaining behaviour is self-efficacy, combined with visibility, within the community the individuals identify with. The tactics used to compete for status among the Litterati include visual appeal, time, humour and reciprocity. The tactics proving to be the most useful are visual appeal and time. Visual appeal is unique in that there are a great number of costs associated with producing items that are aesthetically pleasing, as described in section 6.6.1. Aesthetics in relation to cost signalling theory are costly in that the production of such requires a certain degree of skill, intelligence and time to produce something that others admire. These costs are difficult for others to replicate, although the social attention-holding potential of visually appealing photos serves as a high-status model for others to copy. Visual appeal is most likely linked to Prestige; however, there are aspects of Dominance associated with visual appeal. This is attributed to coercive forms of cooperation, where individuals still align with overall group goals; however, the means by which they do this are less honest compared to others. An example of this would be the use of certain photographic tools, manipulations or repositioning of objects to make a more interesting or visually appealing photograph. This is difficult to recognise in the realm of Instagram, but several members do publicly announce the extra tools they apply to their photographs. Even David is honest about moving an object to get a better photograph (he mentions this in a caption of one of his photos).

In particular, the tactic of time is used to show either Dominance or Prestige. Individuals who devote time to producing visually appealing photographs or collections are highly admired, thus demonstrating Prestige. Comparatively, when time is used to produce a high volume of photos, it is perceived as Dominance, as demonstrated by the lack of reciprocity between members. Those who produce high volumes of photographs do not engage with other members, are not well liked nor remembered.

Cost signalling is demonstrated through the use of different tactics prevalent among the Litterati. Cost signalling represents an individual's ability to withstand the costs associated with engaging in certain types of behaviours or activities. Typically, these behaviours are too costly for others to replicate, thereby giving status to the actor. Creating visual appeal is a unique form of cost signalling because it signifies the time, skill and intelligence an individual has for producing something that is visually appealing. Throughout the interviews, time[5] was perceived to be the biggest cost associated with Litterati activity, yet other members did indicate that they try to produce something visually appealing, unique, or humorous. In relation to environmental factors identified by Hardy and Van Vugt (2006), visibility appears to be the most prevailing aspect in engaging in this type of environmentally friendly behaviour. Conspicuous consumption has been examined for over a century, starting with the formal writing of Veblen (1899). Many argue, however, that Veblen's

[5] The perception and value of time was discussed in section 7.4, however, the concept of time presents an interesting area for future research, particularly in terms of cost signalling theory. You could have an abundance of time, wealth of time, because you have the skills to acquire more time than others. This could be obtained through efficient use of time or perhaps having the intellect to use time effectively. Conversely, an individual may have a wealth of time because they lack the skills to maintain employment. For the Litterati, members described different perceptions of time, typically devoted to activities interviewees found enjoyable. For example, Fred indicated he had time for picking up litter, photographing it, and editing the photos, however he did not have time to devote to other pro-environmental behaviours.

critique of consumption among the leisure class was based on evolutionary theory as opposed to sociology (Patsiaouras and Fitchett, 2009).

3. *Research objective 3*: *To better understand the paths or routes people use to achieve social status within a hierarchy.*

The four competitive constructs identified in the literature appear to provide a clearer understanding of the paths for achieving higher status. Individuals within the Litterati use the tactics available to them to compete via one of four competitive constructs: agonistic competition, cooperative competition, calculated cooperation and copying. It was proposed that agonistic competition and calculated cooperation were linked to Dominance, and cooperative competition and copying are linked to Prestige. The data supports this theoretical proposition; however there is an indication further exploration into these competitive constructs is necessary to complete the theory on the path for achieving higher status.

4. *Research objective 4: To evaluate the causal tendencies between tactics, competition and the choice of either a Dominance or Prestige strategy for status within the Litterati community.*

Cognitive processes, such as adaptive mechanisms described by evolutionary psychology are thought to play a significant role in behaviour, however, environmental cues also play a role. Ruse (2009) states, 'we get cultural changes and variations that are too fast moving and too drastic to be directly and completely controlled by the biological forces of selection. Rather culture in a sense sits on top of biological constraints and dispositions' (2009, p. 250). Ruse (2009) further discusses the existence of underlying channels in which 'culture must flow', these channels would be the causal mechanisms which are not wholly observable; this is the reality which is beyond our full knowledge. What we can do is apply theory in order to explain these mechanisms. For instance, when the theme of pride in place arises through speaking to Leigh Anne, Fred, Martha, Joe and David, it demonstrates the adaptive tendency for a disregard for impalpable concern identified by Penn (2003). This adaptive tendency has a theoretical underpinning of sensory mechanisms, environmental mismatch and biophilia (Griskevicius et al., 2012). There is a disconnect between the intangible impacts related to climate change, particularly when the most detrimental impacts occur in distant regions of the planet (i.e. polar ice caps melting at alarming rates). The traditional psychological perspective would describe this disregard for impalpable concerns with Construal Level Theory (Liberman and Trope, 1998). This theory posits that mental disconnect to objects, people, places and events increase as distance increases. And while many would agree with this assertion, the theory provides an incomplete answer. Construal level theory does not indicate *why* individuals decrease concern for people, places, objects and events as distance increases. It describes the empirical events without acknowledgement of the underlying causes. It presents the proverbial cigar as just a cigar, but what about the ingredients in the cigar, the people who made the cigar, the people who grew the tobacco, the future health implications of smoking the cigar, the drain on the healthcare system. This is where evolutionary psychology and critical realism step in to provide a more complete answer in explaining why people care more about their immediate surroundings compared to distant places.

Penn (2003) ascribes the inability of humans to adequately respond to environmental risks, especially distant ones, to the complexity associated with global climate change. To save energy, the brain developed heuristics, or mental short cuts, to respond quickly and easily to environmental problems. Thus, when it comes to the environment, we have developed an ecological rationality (Saad, 2009; Griskevicius et al., 2012) that allows us to have immediate concern for our proximal surroundings. It is this rationality that places more concern on our home turf than over the polar ice caps. Penn (2003) goes on to describe how this heuristic developed, it is thought, from the evolutionary perspective which holds that the human mind was designed to respond to problems faced during the Pleistocene era. Thus, despite having the ability to solve complex problems, other problems, especially those faced by human ancestors, are often solved using simple heuristics. When faced with the problem of environmental degradation during the Pleistocene era, humans simply relocated. Conservation and preservation were not considered, because there was no benefit in doing so at that time. Faced with the challenges of a changing global climate and its associated impacts, this evolutionary theory on environmental risk presents a barrier to making large-scale changes to promote sustainable consumption. According to evolutionary psychologists, because the present day human mind evolved during the Pleistocene era, it is difficult to encourage humans to preserve the environment. The existing mechanisms within the modern brain were evolved during the Pleistocene era, however, this is not to say that the human brain has not changed or that behaviour is pre-determined. The existing mechanisms are what enable behaviour to further adapt, change and develop, a position that is often misconstrued by critics of evolutionary psychology (Saad, 2009).

While this is considered in models such as the Theory of Planned Behaviour, it fails to consider the most influential factors in behavioural decisions. It is argued in this thesis that self-efficacy and the desire for status explain the decision to undertake pro-environmental behaviours more fully than existing models. Ivanic (2015) presents a theory on Prestige and status in relations to pride, esteem and salience or visibility. This requires greater exploration into the theories on self-efficacy, and further into creative self-efficacy.

The act of picking up litter especially in public places is outside the norm, or outside conventional public behaviour. Many of the interviewees comment on this and it is something I too feel when out on my litter walks. Picking up litter is not normal behaviour and there is discomfort in this, yet we still do it, perhaps because we more strongly identify ourselves with the people helping to solve the problem. Martha makes this point very well; she describes a trip to New Mexico, where she shadowed some US Park Rangers for a few days. One of the responsibilities of the job is to dedicate a certain amount of time to picking up litter in the park. What struck Martha most was that Rangers would pick up litter outside of the designated work period. She had asked one of the rangers about this and they replied by saying that if you are just stepping over it and not picking it up, then you are 'just as much of the problem'. Right away, Martha thought, 'that's not me' and she started picking up litter regularly when she returned home. The desire to disassociate with people who litter is so strong it overcomes the tension that coincides with picking up litter. Each interviewee mentioned this tension, but they know they are doing something good, something that others appreciate, despite being worried they are perceived as 'crazy' or 'strange'. Despite these internal concerns, from the activity itself each interviewee mentions positive reactions from it. For instance, Martha has developed a new friendship from being observed picking up litter. Joe said he often receives smiles from passers-by, which helps him continue his work for longer periods of time. Fred receives positive comments from cyclists and runners along the trail he routinely visits, and David receives positive reinforcement through more formal channels at work.

From a broader Consumer Culture Theory perspective, these types of reinforcing behaviours would be construed as a co-creation and identity within a subculture. Schouten and McAlexander (1995; p. 43) define a subculture of consumption as a 'distinctive subgroup of society that self-selects on the basis of a shared commitment to a particular product class, brand or consumption activity'. Other characteristics include, 'identifiable, hierarchal, social structure; a unique ethos, or set of shared beliefs and values; and unique jargons, rituals and modes of symbolic expression' (Schouten and McAlexander, 1995; p. 43). While the Litterati does embody the characteristics of a subculture of consumption, or anti-consumption, the theory does not explain why this happens. Evolutionary psychology, underpinned by critical realism, helps to explain the unseen forces, which shape this type of behaviour. There are forces beyond the observed experience and beyond the societal impacts, which ultimately influence behavioural decisions. At the empirical level members of the Litterati perceive themselves as doing something good, being part of something larger than self, something creative and enjoyable. Consumer culture theory describes the rituals and institutional social forces that create identity within a specific place or time, thus explaining the identity of the members in the online community. Evolutionary psychology views this behaviour as a strategic way of navigating social hierarchies where adaptive mechanisms, such as desire for relative status, disregard for impalpable concerns and self-interest, are activated. This presents a very stratified explanation of a certain type of experience, one that can never be fully explained. We will never get to the real answer but each level of explanation brings us a little closer to fully understanding human behaviour.

Carolan (2005) discusses the rootedness and emergence terms of Bhaskar, which allows for coexistence of being and becoming. So the causal tendencies associated with behaviour are not equal to determinism, they are instead dynamic, changeable and move in both directions (up and down). Applying this to the issue of strategy for status further suggests that Dominance and Prestige are also dynamic and changeable, between two polar ends. From this perspective there is a relationship between the biological and the social, which cannot be ignored when exploring behaviour. Carolan

(2005) makes a further argument that often we are quick to avoid being judged as too biologically determined, but there is the equal danger of being too culturally determined.

5. *Research objective 5: To discuss how a strategy for social status, competition and tactics can be applied to the theory of the universal desire for status.*

This research provides evidence to support this first part of the model, using the interviews with Nate, David and Robert, and further supported by recent research by Ivanic (2015). These three Litterati members already have high status and do not experience a threat to their current status, yet they each engage in costly behaviour to maintain their high status associated with their rank within the community and their jobs. They identify with the Litterati due to the connection with work or activities they are engaged in already. For Nate and David the activity is incorporated in the educational programmes they are involved in, while Robert has actively been involved in community improvement efforts for several years.

For members such as Fred, Joe and Leigh Anne, who all experience changes in their work status, they use Litterati to achieve higher status within a new group they identify with. Fred and Leigh Anne have engaged in this type of behaviour in the past, however, the visibility of the behaviour and the creativity associated with the photos provides additional motivation for them. This is tied to the theory of cost signalling and the evolutionary notion of aesthetics.

Litterati provides the opportunity to increase perceived status through self-efficacy. The views expressed in the interviews indicate strong perceptions of self-efficacy in relation to engagement in Litterati. Even Fred, who says in his interview he is not that creative, produces some of the most admired photos among the Litterati. He is quite modest about his skills, but really enjoys the opportunity to be creative without having to be, in his words, an 'artistic genius'. Like Joe and Leigh Anne, Fred has encountered changes in his journey. Until recently, Fred worked in a vinyl record store for close to 22 years. Over that time he built up a collection of 10,000 record albums. Music and knowledge of music were very much a large part of his life, of his identity; however, in the past few years Fred has gotten divorced and moved to a new city. Despite his years of experience in record stores, in his new city no one would hire him at a senior level, where he could earn a living wage. Faced with the challenge of supporting his young daughter he now works for a pipe fitting company, working in sales and service. Along with the job change Fred had to reduce his record collection by 80 per cent as he now lives in a much smaller space. During his interview it becomes clear that Litterati provides Fred with an activity he enjoys doing and perhaps replaces his collection of records, with a collection of photos, which do not require physical space (Belk, 2013). Fred is able to identify with the group because of his interest in photography and previous experience with picking up litter when he was younger. He competes cooperatively, expressing his own unique style and showing support to other members, without out-performing anyone.

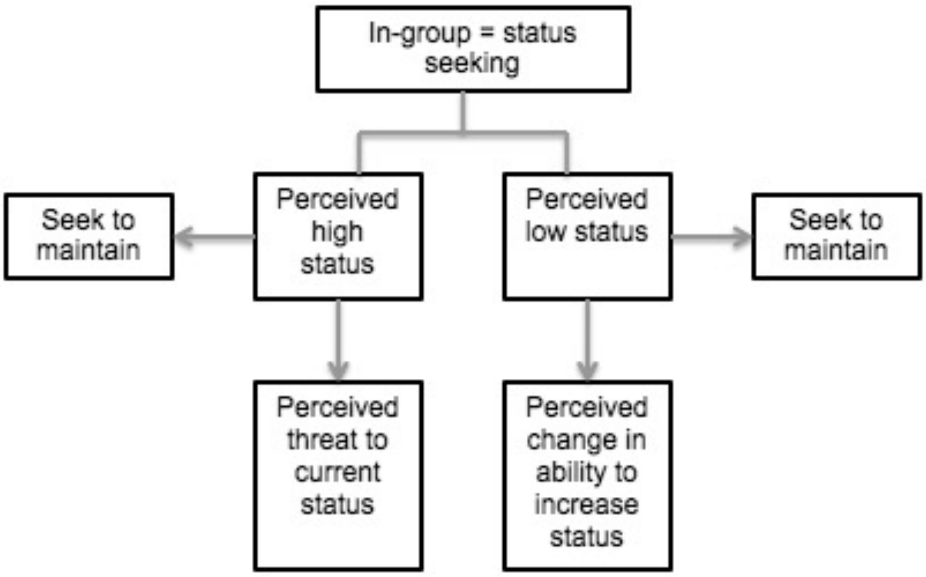


Figure 8.3: Model indicating initial status seeking motives when entering a new peer group.

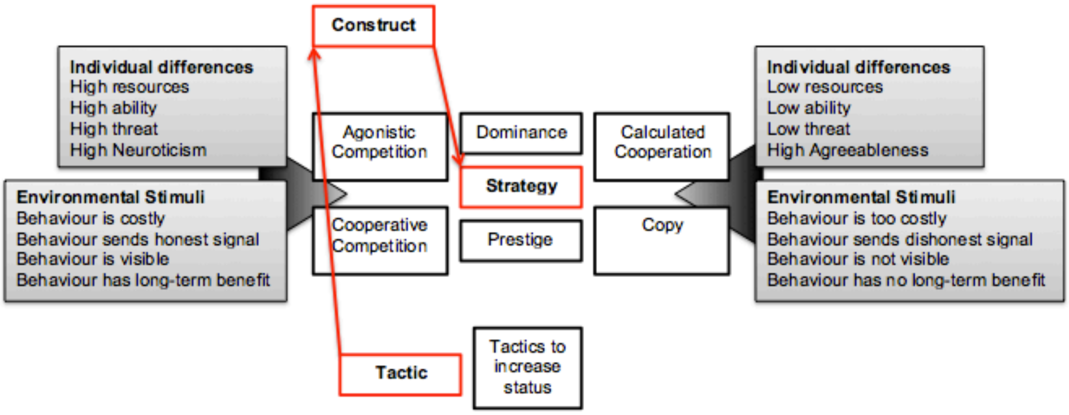


Figure 8.4: Previous model. Figures 8.3 and 8.4 present the model previously introduced in Chapter 4, predicting how and when individuals seek higher status and the factors that influence that decision.

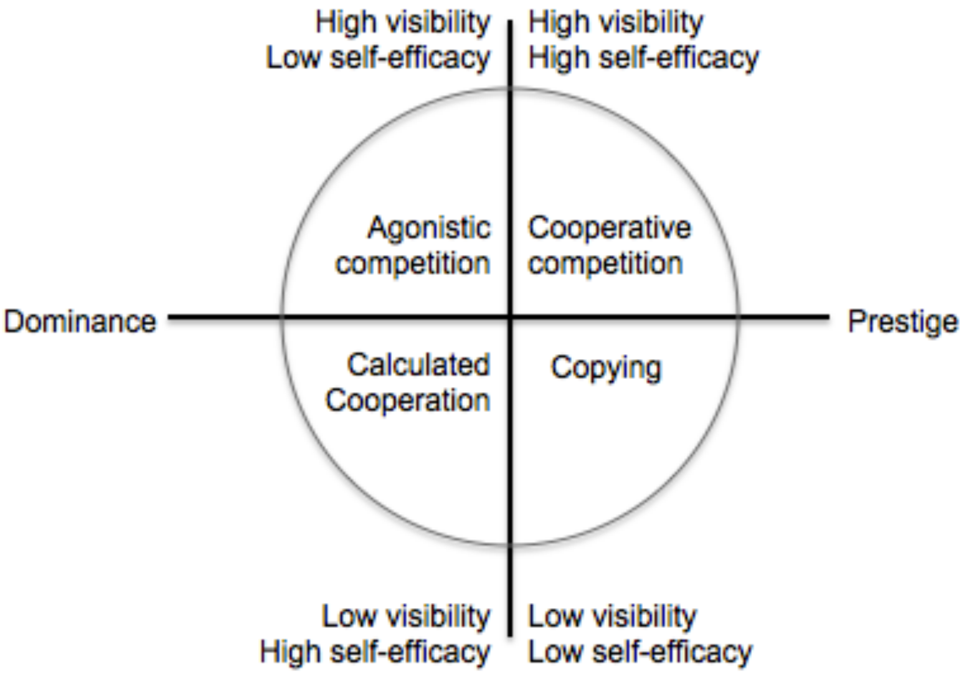


Figure 8.5: Updated model based on the conclusions from the research data.

This research does provide evidence consistent with evolutionary theories on status and cost signalling theory; however, there are other possible explanations for the behaviour observed among the Litterati. From the perspective of Consumer Culture theory, the Litterati is to be viewed as a socio-cultural movement co-evolved with techno-culture, which facilitates the creation and co-creation process of multiple identities, across multiple platforms. There is social diversity provided by the Internet and social media that allow us to seek out new ways to gain status, fostering new multiple selves. The increased usage of the Internet and social media forces social identity created online to take on a central role for the individual. It is this central role on the Internet that makes studying behaviour through netnography a valuable tool for observing and analysing behaviour. The networks created through mutual shared interests become a secondary family or friendship structure.

The explanation from the proximal perspectives stops there. However, describing the Internet as a friendship or family structure allows evolutionary psychology to add to the explanation of engagement online. The evolutionary perspective allows for aspects of kinship theory to emerge. Reciprocity among strangers makes sense in this realm, as does support, cooperation and hierarchal structures. A need for order is created and the hierarchy reinforces that. Individuals move and adapt within the confines of the network. The desire to seek status underpins the motivation to participate, interact, excel and compete. From the evolutionary perspective we evolve with the tools we create and yet as we seek out groups with which we identify with and share interests with, we also rely on set order and structure to maintain the security within that group. We seek a place within the group to fulfil adaptive mechanisms. Even Fred has sought out a potential mate or friend through other Litterati, as has Martha. Being on the inside, even at a lower status, brings more comfort than being exiled. The example of the Litterati does not equate to a life or death situation but it does fulfil some of the innate problems, which we continually attempt to resolve. We put out skills to use in an attempt to move up the ranks.

8.3 Contribution of the thesis

There is no complete theory on status, strategies and competition for status. This research contributes to existing evolutionary theory on status by presenting a greater understanding of how strategies and tactics work. It differs from existing research not only by exploring status strategies qualitatively but also it suggests that a person may change their strategy depending on environmental cues. It is argued here that

Dominance and Prestige, although divergent, may be better assessed on a polarised scale, where an individual moves between Dominance and Prestige based on environmental cues, perceived sense of community synchrony and self-efficacy. Reciprocity and continued validation or visibility further reinforce perceived status and maintain community goals.

The methodological contribution of this research is the application of critical realism to evolutionary psychology. This has been discussed conceptually and applied in only a few instances by Derksen (2010) and Carolan (2005). Although there is little discussion on ontology within evolutionary psychology research, and very little published work on it, there is evidence here to support the combination of ontology and epistemology. Critical realism provides a philosophical and analytical framework that enhances the validity of evolutionary psychology research. Using netnography to understand complex behaviours, an evolutionary psychology conceptual framework further contributes to methodology, where evolutionary psychology typically relies on experimental approaches.

8.4 Practical implications of the research

While the main theoretical contribution builds upon theories of status by clarifying the paths people take for achieving status, this research exhibits both direct and indirect practical implications. The direct practical implications are reflected in the reported changes in consumption decisions as a direct result of the Litterati participation. For example. both David and Leigh Anne, explicitly stated changes in their consumption choices based on their experience with the Litterati. They further linked these changes to the validation they received through their Litterati participation. The self-efficacy achieved through interaction of an ethical online community helped members achieve a higher-level of self-efficacy through the perceived similarity to other members. Leigh Anne even refers to the Literati as ‘my people’ indicating a perceived similarity in interests and activities with these virtual people compared to peers within a closer proximity to her. The online community enabled members to take further actions, to see beyond their immediate actions.

Another direct implication of this work is in terms of the adaptive trait to have a disregard for impalpable concerns. Seeing litter and picking it up, combined with the collective community effort makes our collective environmental impact real. Through the use of the map and weekly reporting on total litter collected overcomes the barrier presented in Chapter 2 on perceived consumer effectiveness and further discussed by Thøgersen and Crompton (2009) in terms of small steps. When individuals feel as though their effort has little impact on social or environmental change, they lose motivation to continue certain behaviours. As an ethical community of consumption online, individuals among the Litterati can see that their 'small steps' do lead to a big change. This concept could be applied to other types of pro-environmental behaviours such as using jars for grocery shopping, as discussed and photographed by some members. The community impact on perceived self-efficacy can be applied to higher effort behaviours, which Osbaldiston and Schott (2013) describe as requiring different behaviour change tools.

Indirectly, the observation from the Litterati may help companies looking to understand why people litter and how to stop it from happening. From a branding perspective seeing packaging as litter has a negative effect on consumer perceptions of the brand. The problem of litter has companies thinking of how this can be prevented either through some type of messaging or packaging design. Bringing this back on to the producers is a way to make this come full circle as well. They are part of the problem and need to work on ways to make changes as well, beyond what consumers can do. This can be applied to some of the more recent marketing literature by McDonagh and Prothero (2014), Wells et al. (2011) and Leonidou et al (2010).

By examining the relationships and then measuring the influence of these conditions one may be able to not only predict which strategy individuals will choose, but also identify key interventions for encouraging altruistic behaviours such as pro-environmental behaviour. Furthermore, visual representation of branded goods as litter indicates a negative relationship between the consumer, product and company. For example, Coca-Cola products are one of the highest numbers of items collected and photographed by Litterati members. The reoccurring visualisation of the brand as litter has revealed a rejection of the company by several of the Litterati users. Wider implications of this research not only contribute to evolutionary theory, but also explore the relationship between consumer, product and producer.

There are further practical contributions regarding the topic of consumer engagement. Although there is research that says online engagement does not equate to behaviour offline, there is evidence from the interviews and the observation that shows that acceptance into the Litterati does lead to higher effort behaviours. Individuals share comments about making lifestyle changes, such as reducing waste. Both David and Leigh Anne describe reducing the amount of plastic products they use and purchase. Strong brand communities are a valuable asset to marketers, especially when it comes to maintaining customer loyalty, introducing new features and getting feedback from consumers. Although the Litterati is not necessarily a brand community consuming one product, it does behave like a brand community and it is making changes to its features to make it easier and faster to use. This appeals to the Litterati members because time tends to be a big barrier to increasing their behaviours, and Litterati intends to respond to that, all the while increasing the amount of data it collects.

The Litterati consists of a heterogeneous mixture of individuals with differing goals, despite the one overarching main goal. What this means in broader terms, especially when marketing pro-environmental behaviours, is that one approach is not going to lead to wide spread changes within the public. Making behaviours visible to allow for status competition could be more effective than appealing to norms and values, but perhaps a parallel comparison would be effective.

Exploring these behaviours from an evolutionary psychology perspective indicates a much more holistic approach by appealing to the universal desire for status. By understanding this, messages and campaigns can be designed to integrate aspects of status and visibility, self-efficacy and validation. The validation with the behaviours and the status it brings does indicate this could be a longer-term method for changing behaviour based on the things interviewees have said.

8.5 Limitations

Although research provided an in-depth examination of status seeking behaviours within an online community, research, particularly online, is not devoid of certain limitations. The following describes the limitations extended upon this research.

This research used qualitative methods, which rely on researcher interpretation and observation. As indicated in section 5.6.3 and 5.6.4, this limits the objectivity of the research conducted, where observations are often influenced by researcher bias. The researcher bias was acknowledged and discussed in section 5.6.3. Furthermore, as indicated by Elliott and Jankel-Elliott (2003) while ethnography allows researchers to gather rich information rather quickly, it often produces just as many questions as it answers, or results may be more ambiguous than expected.

Further limitations are found while conducting online research. Social media allows individuals to create a different persona online compared to the real world. Although Bullingham and Vasconcelos (2013) find many individual recreate their offline persona online, they tend to edit certain aspects of themselves. Therefore, Litterati members followed on Instagram may or may not be as environmentally friendly as they appear to be. Where individuals have been found to want to appear more pro-social in academic surveys (Carrington et al., 2010), this may occur online as well. Therefore, the online behaviour observed of Litterati members may not be an accurate representation of an individual's behaviour offline.

Although ethnography is described as a method, which provides a rich description of human behaviour, it is limited in that its observation is particular to one group or culture (Elliott et al., 1999). In order to establish stronger conclusions that are generalizable, studies need to be replicated across different demographic groups and communities.

8.6 Directions for future research

Although this research does shed light on how and when individuals engage in status seeking or maintaining behaviour, the theories on status could benefit from additional exploration on the relationship between Dominance and Prestige. Cheng et al. (2010)

created a scale to measure individual levels of Dominance and Prestige, however, it may be beneficial to establish a new scale, which considers the relationship between Dominance and Prestige. This should include an understanding of the motivations to engage in either a Dominance or Prestige strategy for status, as well as an understanding of the point in which an individual changes his or her strategy. Additionally, Hawley's (2011) discussion on competition and its implications on methodology suggest the use of scales for measuring competitive constructs. Examining competition and Dominance and Prestige quantitatively could add further validity to the current findings of this research as well as provide a more complete theory on status.

Self-efficacy was a strong pattern within the findings of this research. Theory regarding self-efficacy and status also introduces self-esteem, without a clear discussion on the relationship between the two cognitive processes. Future research on the desire for status and behaviours related to status seeking would benefit from a greater understanding of this relationship.

Lastly, visibility associated with Litterati provides validation for the behaviour or reinforcement. In the instance of increasing the adoption of pro-environmental behaviours, applying the same visibility in combination with a strong community could lead to an increase in long-term behaviour change. Making other pro-environmental behaviours visible, such as reducing energy consumption, promoting cycling behaviours and slow travel, may lead to wider public engagement with pro-environmental behaviours.

8.7 Chapter summary

This chapter summarised the key findings and concludes the thesis. It further highlights the key theoretical contributions to the academic body of knowledge in marketing and evolutionary psychology. Directions for future research were also discussed. Overall, understanding and applying status seeking behaviour to consumption and pro-environmental behaviour could potentially increase long-term adoption of PEBs. Individuals will engage in costly behaviours to maintain or achieve higher status. Individuals will change their strategy based on environmental cues and perceived self-efficacy to fulfil individual and group goals. Although Dominance and Prestige are divergent strategies, an individual may alternate between strategies based on environmental cues.

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